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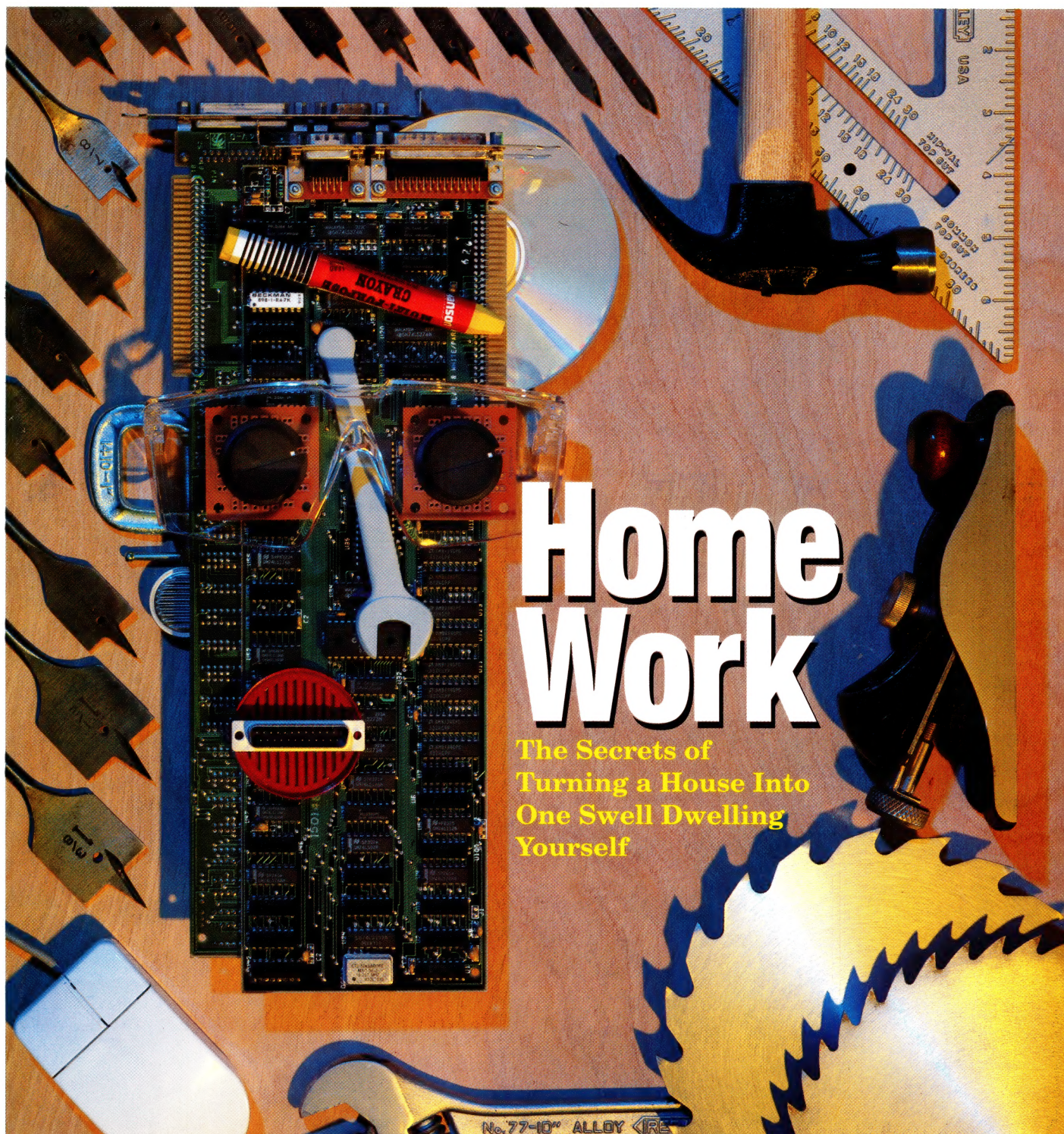
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AUGUST 1994 \$2.50

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M A G A Z I N E



Home Work

The Secrets of
Turning a House Into
One Swell Dwelling
Yourself

Questions?

Is there an alternative procedure for amniocentesis?

What software will link laptops to LANs?

Which should I buy: Ford Explorer or Jeep Grand Cherokee?

Are there articles on how to finance a franchise?

Is there a summary of who should get a flu shot?

What should I consider when saving for my kid's college education?

Any new ideas on collecting delinquent accounts?

Which defense contracts has AAI Corp won?

Is upgrading my 286 worth the trouble?

How can I get my baby to sleep through the night?

Are there any reviews of Madonna's latest book?

How do I care for my child's croup cough?

Are there simple tutorials on customizing Windows?

What is the latest research reported in the trade press on recycling plastics?

Which recording of Brahms Concerto in D Minor should I buy?

Are there recent articles on new treatments for allergies?

How much did Value City Department Stores pay for Gee Bee?

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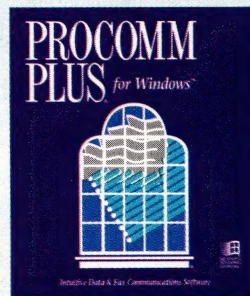
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Dwelling on the subject of house repairs, renovation, or new-home construction? When the furnace bellows smoke or a new foundation must be laid, many homeowners turn immediately to a professional. CompuServers, seeking an active role in their abode's maintenance or creation, are looking to online resources, most notably the Homing Instinct and Family Handyman forums, to help them understand how their home is put together and tackle big projects themselves. Plus: House design by PC; how to hire a pro; "smart" homes; healthy building materials; online uploads.

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Dear Reader

Homeowners are logging on to solve their household problems. They're checking into the Family Handyman and Homing Instinct forums and getting feedback from contractors, architects, and fix-it experts on broken ceiling fans, whistling dryers, rotting decks, and other annoyances. They're also seeking expert advice on remodeling and renovation projects.

Although problem solving is their immediate objective, we noticed the development of an underlying trend. No longer do homeowners readily pay someone else to do the job; rather, they devote their spare time to sawing, sanding, painting, hammering, and more themselves. We wanted to know why.

In this month's cover story, beginning on page 10, you'll discover CompuServe members who want to rule their roosts. They seek to understand the problems that occur in their houses, to find the best solutions and tools that address those problems, and to hire conscientious professionals when doing the job themselves isn't viable. In addition, we discovered homeowners are experimenting with home-automation systems, despite the high cost and bug-infested technology, aspiring toward environmentally safe houses, and employing computer-aided design programs to share their design dreams with architects and builders.

"Home Work" will introduce you to this increasing population of do-it-yourself homeowners. It will also expose you to a world of online experts, who offer more tools and advice than the local hardware store can supply.

* * *

Too often people take advantage of a good thing and then fail to give something back. Sometimes it's because of forgetfulness. Other times it's because of selfishness. In the shareware business, where computer users are given the chance to try software before they buy and then asked to register upon acceptance, both human foibles come into play.

Shareware authors offer "bonusware" to circumvent downloaders' negligence to register and pay. In "The Benefits of Bonusware," on page 24, we explore the incentives being offered, as well as shareware authors' input on the ups and downs of marketing a product on trust.

CompuServe's shareware registration program makes it easy for shareware users to honor that trust system. It's now HMI-compatible and offers new features that CompuServe members requested, such as choice of disk size and identification of operating systems. A tutorial for CompuServe Information Manager users is offered on page 26. The choices described in the tutorial also apply to terminal emulation.

* * *

Think chivalry is dead? That a yearning for times of jousting, mead halls, fair maidens, and knights in shining armor is much ado about nothing? Read "Surely You Joust!" on page 40 and discover how and why CompuServe members are celebrating medieval times. Then join the revelry and pageantry online in the Living History Forum.

Meanwhile, take time to read "Outstanding in Their Forums" on page 44, so you can meet CompuServe members who have contributed to the success and richness of forum experiences through advice, support, and goodwill. Many forums honor these members with member-of-the-month programs. We wanted to honor them in *CompuServe Magazine*.

Kassie Rose
Editor

PowerPC

I was astounded by "Chip Decision" (May, p. 21). I use a Macintosh, as do many other people, and the article's complete disregard for the Macintosh as a significant business or personal computer borders on the ridiculous.

PowerPC still on the horizon? Why do DOS and Windows users continue to say this? Apple has brought forward the first generation of PowerPC-based Macintoshes (Power Macs), which are proven to be faster and more powerful than any Pentium-based computers. The Macintosh operating system is now available for PowerPC, while Windows NT will not be available until the fourth quarter of this year.

The recent television commercial for Intel touting the power of Pentium (the flying-Pentium-chip ad) was made on a Macintosh Quadra because there wasn't enough time to do it on a PC. Bill Machrone, the PC guru quoted in the article, dedicated a column in *PC Week* to the PowerPC, stating that that's what his next computer would be. Why? Because it offers working versions of all the technologies and features that Intel-based systems keep promising and falling short on. Still think that DOS and Windows are the only alternatives? Sure, and eight-character file names are the best way to describe your files.

Mike Warriner
Danville, California
73113,3272

CompuServe makes no pretensions as to which computer platform it prefers. "Chip Decision" was the most biased article I have seen in your publication. Not only was the PowerPC brushed off in two pathetic paragraphs, but also, the truth was not revealed. Even PC-specific publications have touted the superiority of the RISC PowerPC chip. Why not mention that in the article? And why not mention the 68040 chips? They perform close to the equivalent speed of '486 chips and are used in the original object-oriented system software (not that Mac wannabe, Windows). The truth is, PowerPC is better than anything else this side of a workstation.

Spiros Agelopoulos
Cupertino, California
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What about the Macintosh System 7? Macintosh pioneered the graphical operating system, revolutionized the publishing and prepress industries, and managed to stay solvent for 10 years despite the fact that its products have always been seen as "cute graphics toys." The Power Macs may be cute, but they are surely not toys. The price/performance ratio for the Power Macs

blows the Intel machines away. Apple is doing more than any other commercial entity to promote the PPC chip. It shipped more than 145,000 PowerPC-based computers in roughly the first month of production. How could you overlook them?

I could go on about how this oversight reflects a long tradition of Intel-based computer users' bigotry against the Mac. Suffice to say that I will savor the head start that Apple has with the PowerPC chip as I watch the Intel-based machines crawl into the Silicon Valley tar pits to die.

Reverend Ian C. O'Keefe
Austin, Texas

I recently bought a Power Mac, and I assure you, there's nothing like it! Blazingly fast, it once again demonstrates Apple's leadership into the future of technology. What is most remarkable is that while "native language" programs for the Power Mac are slowly becoming available, the backward compatibility has given me all my old software at significantly faster speeds. As my productivity skyrockets, I have even more reason to pity the people who've invested in the clumsy PC/DOS/Windows environments. But they can take heart: if they get a Power Mac, which can run DOS/Windows programs, they'll be able to keep using all their software while making the transition. Macintosh has always offered, and likely always will offer, a friendlier interface as it pioneers new territory for the others to imitate but never match.

Dr. Richard M. Kirschner
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As a self-nominated power user, I was interested to read "Chip Decision" but dismayed that the author missed a very fine point: it's not always the hardware that causes a bottleneck, but the software. I was amused to read about users who bought Pentium machines to run Windows 3.1.

The '386- and '486-based machines can handle information 32 bits at a time, yet current DOS and Windows technologies limit the user to 16-bit computation. This effectively halves the potential speed and power of your CPU. It's like flying the space shuttle to go to the corner store just for a liter of milk; a lot of potential power is used inefficiently.

If a user really wants to increase computer speed, it is more cost-effective to upgrade the operating system (such as by using OS/2 for Windows) than it is to buy a new CPU or motherboard. This option allows users not only to run software faster but to do more with their computer time by allowing the software to run while performing other tasks, such as formatting a dis-

kette or printing a document while recalculating a spreadsheet—something that DOS and Windows simply cannot handle, no matter what CPU you have installed.

Brad Barclay
President, WAFFER! MultiMedia Productions, and member of TEAM OS/2
Brampton, Ontario
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Computer-Care Tips

I love *CompuServe Magazine*, but "Getting Down to PC Upkeep" (May, p. 10) contains a terrible blunder. I don't know how many times in my 20-year career a customer has called me after vacuuming his computer to report fried memory chips or strange behavior. He usually winds up spending hundreds to put things right.

A vacuum of any kind, especially one with a brush attachment at the end, is one of the best generators and transporters of static electricity. When a vacuum is running, especially an old one, it generates a good static charge that can dissipate right where you don't want it—in a chip. Never, under any circumstances, use a vacuum on the inside components of your CPU, even the tiny ones that are sold "for computers." Always use compressed air to blow dust away from all internal components.

Bruce Landry
Hollis, New Hampshire
76114,1341

At least one part of "A Computer Care Summary" (May, p. 13) is incorrect. It says to clean the monitor screen with lint-free cloth and glass cleaner. Glass cleaner will remove the monitor's anti-glare finish. Instead, use lint-free cloth and distilled water.

Budhi Prajogi
Boca Raton, Florida
73651,634

Language Translations

Thank you for taking up the subject of language translations ("In Other Words," May, p. 40). It is rare to read about the translation business at all, and even rarer to get such practical information. I hope lots of potential buyers of translation services will read it.

I have been doing translations for more than 17 years, defying the many frustrations of the business since it is something I really like doing. I wish there were more sources such as your article that potential clients could turn to to get good advice. I hope it will point lots of people to the Foreign Language Forum (GO FLEFO).

Michael Wahlster
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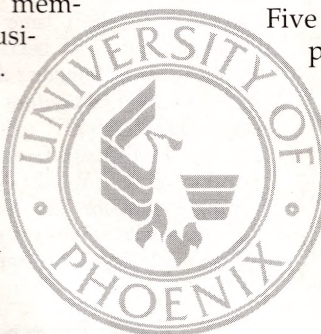
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MONITOR

Scale-Model Models

Think of the world's most plastic couples: Charles and Di, Donald and Marla, Jim and Tammy, and—molded plastic's eternal duo—Barbie and Ken. The members who meet in Section 15, "Dolls and Figurines," of the Collectibles Forum (GO COLLECT) can't stop thinking about Barbie and Ken (not to mention Skipper, Midge, Scooter, Kevin, Francie, and the rest of the gang).

"When I grew up we played with Barbies almost all the time," recalls member and Barbie collector Mary Smolinski. "Barbie was *the* fashion doll." Smolinski says she now collects Barbies for both the memories and the fun. "What other doll has Bob Mackie designing for it?"

There are blonde Barbies, brunette Barbies, Barbies with long hair, Barbies with short hair, even a three-foot-tall Barbie that wears children's clothes. But Smolinski notes that whatever form Barbie takes, she always steals the show. "When people come to our house, the women and girls 'ooh' and 'aah' over my Barbies. The women get sentimental; the girls don't want to leave the room. I've gotten several of my friends either collecting for themselves or starting collections with their daughters."

When Smolinski was a teenager she sold all of her Barbie things so she could buy a new guitar, a move she now sorely regrets. "I even sold my ponytailed Barbie with her black-and-white striped swimsuit—just the kind of Barbie I would love to find now." Smolinski vows never to lose her treasured dolls again.

To learn more about the world of Barbie, chat with the section's members or visit Library 15, "Dolls and Figurines," which contains a variety of GIF image files showing Barbie in her various guises.

Summertime and the Rememberin' Is Easy

Last winter was a killer in most of the United States—and right now, while you're lolling about in the hammock in your Bermuda shorts, is the best time to start burying the electronic nuts and berries to prepare for the winter to come. Windows users who want to keep spring on their computers year-round might consider FLOWERS.ZIP, a shareware program in Library 9, "Bitmaps/Graphics," of the Windows Fun Forum (GO WINFUN) that offers six floral arrangements for use as Windows wallpaper. For those who would rather go directly to summer (undulating palm-tree fronds, leaping, flap-

ping pelicans, ebbing waves), we recommend TROPIC.ZIP, an animated shareware program found in Library 14, "Graphics Gallery," of the Florida Forum (GO FLORIDA) (this registered version features beach sounds too). And then there's the R-rated version, for those who spent too much of the winter dressed in layers of coats, sweaters, down vests, and mufflers: HEDON1.GIF in Library 17, "Naturism/Nudism," of the Outdoors Forum (GO OUTDOORS). It shows a bunch of winter- (and summer-) garb haters frolicking in the surf at a nudists' convention.

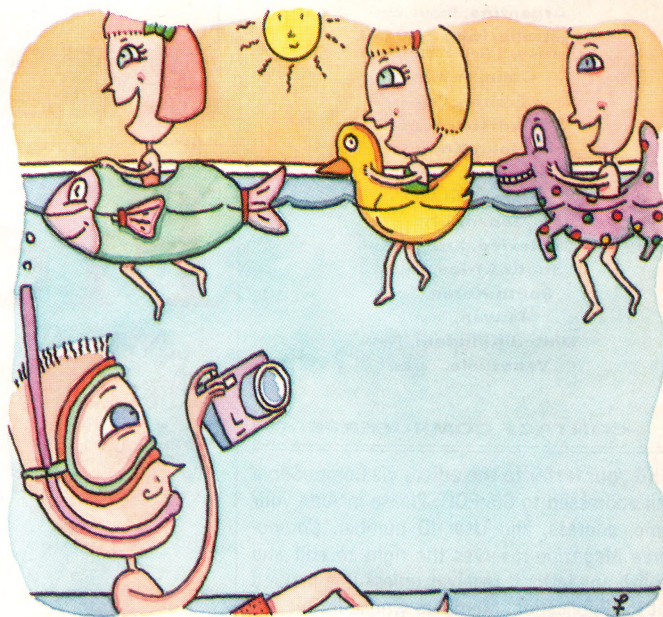
For Those Kodak Moments 20 Feet Under

Whether you're planning to shoot coral reefs in the Bahamas or your kids' feet in a backyard pool, members of the Photography (GO PHOTOFORUM) and Scuba (GO SCUBA) forums say you don't have to spend a fortune on fancy underwater camera equipment.

"The least expensive way to start is with a face mask and snorkel in the backyard pool using a Kodak Weekender disposable camera, which is good to about 10 feet," advises Don Johnson, a Photography Forum staffer. Using an inexpensive camera in a controlled setting is the best way to practice taking steady shots and estimating underwater distances (tasks more difficult in water than on land) without risking life or hardware.

When attempting photo sessions in more challenging environments, according to Scuba Forum member Robin Grantham, budding underwater photographers should learn to dive first and worry about shooting later. "Serious underwater photography is potentially hazardous," cautions Grantham.

Underwater photographers can easily blow several hundred dollars on fancy cameras and accessories. But Johnson and Grantham point out that newcomers who dive only occasion-



PAUL FISCH

ally are generally better off renting their underwater photo equipment from a diving shop. Divers can also place a regular land camera inside a waterproof housing. (Expect to spend about \$30 on the housing for a typical point-and-shoot camera. The device will hold the camera watertight to about 30 feet.)

Johnson advises beginners to start slow and small. "Don't attempt underwater photography until your diving skills are second nature, unless you stick with a snorkel and disposable camera. Build on your skills

rather than trying to match the pros your first time out."

For more advice on shooting photos or videos underwater, talk to the experts in the Photography Forum's Section 7, "Shooting Techniques," or the Scuba Forum's Section 7, "U.W. Photo & Video."

Monitor

Contributors: Cathryn Conroy, John Edwards, Lindsay Van Gelder

It Just Needs a World Beat

The old Judy Garland-Mickey Rooney "Hey, kids, let's put on a show!" concept has hit cyberspace and gone global. Maurizio Del Bianco, a software engineer and music student from Florence, Italy, composed a short harpstring melody track of a song that "had been in my mind for months." He uploaded the melody fragment as a standard MIDI file (DYSSOA.ZIP) to Library 8, "Nanotech/Robotics," of the Cyber Forum (GO CYBERFORUM) and has now invited the online community to add their own tracks. The goal of Del Bianco's experiment: "to obtain a music piece composed by various artists of the world who frequent CompuServe—the result of different cultures and emotional states of mind."

We'd Call Him a Prodigy, But . . .

He may be only 12 years old, but Jay Liebowitz is already CEO of his own software company, UtiliSoft. This soon-to-be eighth grader from Northridge, California, has written two shareware programs—BatchEdit and WinDOS—and when he's not playing tennis or golf or writing a book on morality he hopes to soon publish, he's marketing his software.

BatchEdit is a front end to batch files, which Liebowitz created when he was 10 to help beginning programmers. He wrote it just weeks after he himself learned the ABCs of programming.

WinDOS, his hot, new product that sells for \$35, is a comprehensive and easy-to-use package that helps children and novice adults learn to use a computer, much like the Windows File Manager.

"I formed UtiliSoft to give some structure to my computer programming," says Liebowitz. He also wants to be a doctor when he grows up, and with college and medical school costing tens of thousands of dollars, he's planning

Tracing family history is a fun and challenging task. **B**eginners can find expert help in the Genealogy Forum (GO ROOTS) and can get a great start by reading the file "Quick Tips for the New Family Researcher From A to Z," written by forum member and experienced genealogist Sandy Clunies. The following is an abbreviated version of Clunies's suggestions. You can download the complete text from the forum's Library 1, "General Information," as file QUICK.TIP (8,815 bytes).

A—Attend a genealogy class.

B—Begin with what you know and work backward.

C—Computerize your data collection.

D—Don't fall for the trap "If it's printed, it must be true."



DAVID SESSIONS

in advance, hoping UtiliSoft will help pay the way.

Liebowitz runs the company with his father, Jack, who serves as a consultant even though he doesn't know much about computers. "He gives me advice," says Jay.

WinDOS is available in the Microsoft BASIC Forum's (GO MSBASIC) Library 17, "3rd Party Products," as the file WINDOS.ZIP. BatchEdit is available in the Windows Shareware Forum's (GO WINSHARE) Library 2, "File Apps/Utils," as the file REGIST.TXT.

Digging Your Roots, A to Z

E—Evaluate all conflicting evidence.

F—Find others in the Genealogy Forum who are researching the same family lines.

G—Guard against quick conclusions.

H—Have a general plan.

I—Involve other family members.

J—Just names, dates, and numbers do not make a family history. Interview your older relatives.

K—Keep the first interview brief.

L—Let everyone in the family know about your family-history project.

M—Make letter writing work for you. Write short, to-the-point letters to public agencies and historical societies for needed information.

N—New researchers should first check the Mormon Family History Library in Salt Lake City, Utah, or a regional family-history center.

O—Often small city libraries offer unique resources.

P—Public records are stored on film at National Archives branches in many U.S. locations.

Q—Query family associations, libraries, and other researchers with your questions.

R—Records to research: cemetery, census, church, land, military, probate, tax, town, vitals, wills—and on and on.

S—Sources to research: family records, interviews, newspapers, primary records, public documents, published books—the list is endless.

T—Think of your family-history project as a 1,000-piece jigsaw puzzle. Sort out the pieces, study them, and put them together to make a big picture.

U—Understand that genealogy is wonderfully addicting.

V—Value your family-history project as a significant contribution in your lifetime to future generations.

W—When you become discouraged, back up and research another area.

X,Y,Z—X-pect surprises!

The Anniversary of a Glorious Major-League Fluke

It's been 25 years since the New York Mets, baseball's perennial stumblebums, amazed everybody by winning the World Series and becoming the first baseball expansion team to win a world championship. Sports Forum (GO FANS) staff members are fondly remembering the 1969 season and the team that earned the nickname "The Miracle Mets."

"New York City was abuzz with the miraculous in 1969 and 1970," recalls Sports Forum staffer Gary Reiser. "Pro sports boiled down to New York against Baltimore. The Jets beat the Colts, the Mets beat the Orioles, and the Knicks beat the Bullets on their way to the championship."

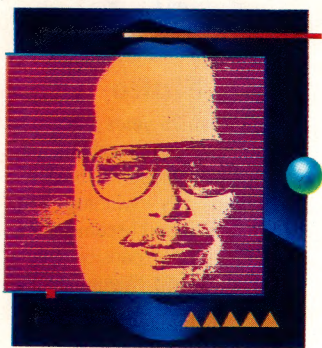
Reiser feels that the Mets' revolutionary performance was symbolic of the times. "Students were having a field day at Columbia University, the Fillmore East was open, the summer was filled with Woodstock, and the gay revolution started at the Stonewall Inn. In other words, it was the perfect time for a team like the Mets to come from nowhere and win the World Series," says Reiser, who remembers participating in antiwar marches and tracking Tom Seaver's career.

To their regret, some forum members can't recall the 1969 pennant chase. "I was involved with school and wasn't paying much attention," recalls Carol Calhoun, the forum's assistant sysop. "Until I joined this forum, I hardly knew what was going on in the National League. I'm a Cleveland fan, and knew the American League better than the National."

But Sports Forum staffer John Kobe will never forget 1969. "Being a lifelong Orioles fan, all I have to say is: ARGGGHHHHH!!!"

Behind the Screens

with John Edwards



The Road to Cyberspace Will Take Its Toll

I'm really looking forward to navigating the upcoming information superhighway. The prospect of viewing *Top Cat* concurrently on 20 channels and being offered the opportunity to buy a nightstick exactly like the one used by Officer Dibble has me excited beyond all belief. Just look at my picture at the

top of this column. See how excited I am?

But I have to admit, I'm a tad concerned about the cost. The Clinton administration has earmarked \$126 million to launch its "national information infrastructure." That's a lot of money to be pulling out of taxpayers' pockets in these tight fiscal times, not that the government lacks any experience in extricating money from pockets. Still, I have several better ideas.

Option 1: Let Bill Gates Pay for It. As recently reported in *Forbes* magazine (not really), Microsoft chairman Bill Gates's fortune is now equal to the sum of all the orange \$500 bills ever printed for Monopoly. Only, Gates's money is real. Since Chairman Bill stands to benefit more than anyone else on earth from an information superhighway, I say let him pay for it. Heck, we'll even name the thing after him. Let's call it the "Gatesway."

Option 2: Let's Hold a Lot-

tery. This is already a popular choice among state governments that need to finance schools, senior-citizen centers, and vacation condos in Hawaii for exhausted legislators. So let's hold a U.S. lottery to fund the information superhighway. I can already see the little white Ping-Pong balls popping up on cushions of air: 300, 1,200, 2,400, 9,600! Who won? Oh, cripes! Bill Gates is smiling and waving a ticket!

Option 3: Mandate Pledge Breaks. Modeled after the nationally famous PBS begathons, service providers would be forced to interrupt streams of news data, naughty movies-on-demand, interactive talk shows co-hosted by Howard Stern and Hugh Downs, and other forms of "cabletainment" to hawk for money. ("And for \$500 you'll get an Info Superhighway tote bag and a copy of *Info Superhighway for Idiots!*")

Option 4: The Modem Meter. Attach a meter to every modem in the country, including the

set-top boxes that link TVs to the information superhighway. The user will pay a specified amount for every bit of data sent and received. (We'll exempt fax-modem owners, since using an outdated technology is punishment enough.)

Option 5: Tell Al Gore to "Come and Take It." Tired of handing your money over to the government for crazy schemes that benefit big business and leave the little guy holding the bag? Tell Al Gore to come over and take the money from you. Dare him! Make rude gestures! Let him know you're an American! Show him a picture of the flag raising on Iwo Jima! You have nothing to worry about. After all, the way society is headed, access to the information superhighway from prison will soon be ruled a constitutional right.

For more BTS gems by John Edwards, GO OLT-130. Edwards is a contributing editor of CompuServe Magazine. His CompuServe User ID number is 70007,412.

WORLD UPDATE

New: Direkt

Readers of *PC Direkt*, in Germany, and *PC Direct*, in the United Kingdom, two of those countries' leading mail-order magazines, can now access the German PC Direkt Forum (GO PCDIREKT) and English PC Direct Forum (GO PCDUK). Members can communicate with the magazines' editorial staffs and their readers in the forums' message sections. Libraries include product information from past *PC Direkt* and *PC Direct* articles; buyer's guides with information on products in specific market segments; and the latest versions of Ziff Lab's benchmarks for help evaluating products.

These publications join other European Ziff magazines online: German Windows Magazin (GO GERWIN), PC Professionell (GO PCPRO), PC Expert (GO PCEFORUM), and PC Magazine U.K. (GO PCUKFORUM) forums.

Pushing the Envelopes: Hassle-Free Printing

It's the question that has perplexed millions of PC users for more than a decade: how to conveniently print an envelope while keeping it from looking like a piece of computer-generated junk mail?

An informal survey of several PC-oriented forums finds that there are numerous shareware solutions to the envelope-printing blues.

In the IBM Applications Forum (GO IBMAPP), several members nominated Envelopes Plus, a program that prints envelopes and labels, generates bulk-rate stamps, and even dials phone numbers stored in its database. Look for the program in Library 7, "Gen. Apps," as ENV412.ZIP (131,968 bytes).

In the IBM Hardware Forum (GO IBMHW), the program of choice was Mail Machine 3.0. The utility prints envelopes and labels on all LaserJet and compatible laser printers. It supports envelopes and labels of any size accepted by the printer. The software can also generate postal-service PostNet bar codes, miscellaneous text messages, and graphics. It's located in Library 2, "Printer Utils.," as MM30.ZIP (245,888 bytes).

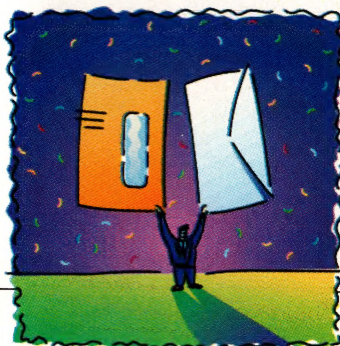
In the IBM Systems/Utilities Forum (GO IBMSYS), numerous members

recommended Quick Envelope Printer/Letter Writer, an easy-to-use program that lets users print a simple envelope and/or write a one-page letter. The program is located in Library 7, "Desktop Utils.," as QENV.ZIP (100,864 bytes).

In the Microsoft Windows Forum (GO MSWIN), several members suggested WinMail for users working with dot-matrix printers. The software lets users copy names and addresses from the Windows clipboard to envelopes or labels. Look for it in Library 12, "Printing/Fonts/WPS," as WINMAIL.ZIP (77,756 bytes).

Many Windows Shareware Forum (GO WINSHARE) members were enthusiastic in their praise of WinGRAB 2.0. The powerful contact manager transfers addresses from the screen, prints labels and envelopes, generates PostNet bar codes, dials phones, logs calls, and provides numerous other communications-oriented tasks. The program can be downloaded from Library 10, "General Win Apps." Look for the file WINGRA.ZIP (380,149 bytes).

To find dozens of other envelope-printing applications, visit the IBM File Finder (GO IBMFF) and search by the keyword ENVELOPE.



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by Patricia Harris
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Dwelling on the subject of house repairs, renovations, or new construction? Doing it yourself lets you truly rule your roost.

FEATURE

CM's Cover Story:
Hammer (and Nail) Time

▼
Smart Abodes, p. 14

▼
Ensuring a Healthy Home, p. 16

▼
Online Resources, p. 19

When the kitchen faucet springs a leak, the ceiling cracks, or the furnace bellows smoke, many homeowners automatically call in a professional—a costly response when repairmen such as plumbers routinely charge up to \$60 or more per job. Seeking a cost-effective alternative, numerous CompuServe members are taking active roles in solving common fix-it problems, using online resources to learn about basic home-repair and building techniques.

Armed with expert advice, they are taking control of their homes in varying degrees. Some are tackling large remodeling and home-improvement projects while a few are even taking the ultimate steps: designing and building their homes. Still others recognize that being in control doesn't require use of a screwdriver or circular saw, but is simply understanding a problem or project well enough to hire the proper help.

Just as members take control of their homes in different ways, online experts define it differently. According to Clay Thompson, sysop of the Family Handyman Forum

(GO HANDYMAN) and a remodeling contractor from Minneapolis, Minnesota, who owns One House at a Time Remodeling, "Being in control is having the ability to fix the things that need fixing without having to pay someone else to do it." However, Christophe Van Oyen, a third-generation architect in St.-Kruis, Belgium, who works

Patricia Harris and David Lyon are freelance writers based in Cambridge, Massachusetts. Their CompuServe User ID number is 75300,316.



Never-ending restoration effort: Virginia abode

LEE BRAUER



BRUCE CRAMER

When homes on the market didn't suffice, they designed the perfect living space themselves: Jim and Nancy McKeown

Control starts with understanding how a house is built: Van Oyen



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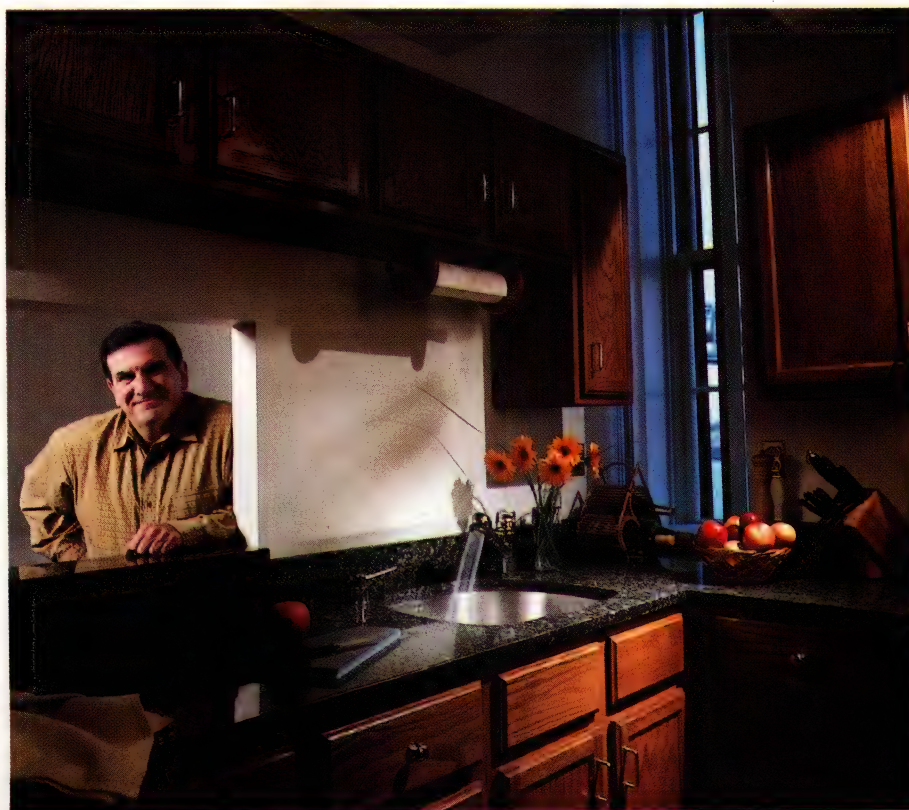


LEE BRAUER

Styled to match the original: Old-fashioned parlor



CHRISTOPHER HARTING



CHRISTOPHER HARTING

Carefully hired a pro to install Italian granite kitchen countertop (above), but remodeled his bathroom, complete with new pedestal sink (left): Safer

CAD as CAD Can: Home Designs on Your Home PC

If you're serious enough about redesigning your kitchen, building an addition to your home, or constructing a whole new dream house, and want to give a contractor something more to go on than graph-paper sketches, your PC or Mac may be your next stop. A variety of new home-design software titles, such as AutoDesk's Home Series Release 2, Broderbund's 3D Home Architect, Expert Home Design, Shapeware's Visio Home, DesignWare's myHouse, and ComputerEasy's FloorPlan Plus, can help you play around with ideas—and not commit grievous errors to brick and wood.

The programs are basically entry-level CAD, allowing you to draw and print exacting two-dimensional floor plans (using a variety of sophisticated tools and templates) or create an object-oriented 3-D "virtual" view of your design, as in the case of 3D Home Architect, using drag-and-drop walls, windows, and furniture. Prices range from \$15 to \$150 for the professional-quality packages.

Programs may not offer every feature you might end up needing, as Mark Porter, a patent attorney with an engineering degree, discovered in experimenting with myHouse. "It had nice features and was easy to use, but it doesn't do layers well—I'd like to make several versions of a design for electrical wiring and plumbing. It doesn't create a materials list, and editing designs was difficult. I tried to modify a gable dormer and somehow realigned the entire roof. I couldn't fix it."

Still, for homeowners and planners willing to invest a little effort into mastering design and drawing principles and learning what CAD can do, the software can pay off. Freelance writer Holly Cochran and her husband built a 1,200-square-foot hillside addition to their tiny Ashland, Oregon, mountain-cabin home, using Virtus's Walkthru for Windows. "I can safely be considered a layperson—my eye for aesthetics consists of knowing what I like in other houses, not what is 'correct'—and found the program immensely helpful in visualizing the final result," she says. The 2-D drawing mode let her lay out the building site, accounting for trees and setbacks, while its 3-D mode assisted in figuring optimum traffic flow and line-of-sight views from various points in the rooms. "When I was nearly done, I 'stood' in the living room and 'looked' out the windows to see where to place porch posts so as not to block the prime views," she says.

Cochran recommends that any software you buy be flexible enough to draw what you want yet structured enough to provide common objects such as furniture and cabinet fronts. "Some programs only allow you to drag and drop rectangles for rooms, triangles for roofs, et cetera. But what if you want an octagonal room, or a complex roofline? The program should let you draw those, too." It should also let you see the entire drawing at once, and have layering, allowing you to *not* view parts of the drawing when you don't want to. "My porch railing is a separate layer because it's very detailed and takes longer to render in 3-D than the rest of the drawing, so I turn that layer off sometimes," she says.

Computer systems analyst Dennis Barry, after designing several homes for friends and relatives on paper, purchased Broderbund's title to begin designing his own house, and likes its PlanCheck and materials-list features. "It will check your plan against com-

mon building codes and give suggestions on how to correct areas," he says. "The materials list is organized like a spreadsheet, so you can place current prices in the cells to calculate the costs."

But if you're unfamiliar with 2-D-oriented CAD programs and CAD conventions, is it worth the money? Homing Instinct Forum (GO HOMING) sysop John Connell, who teaches architecture at Yale University and his own Yestermorrow Design/Build School, thinks the programs largely miss the mark and, with names like Design Your Own Home, promise more than they can deliver. "The technical aspects are given short shrift—nothing keeps you from

drawing up impossible spans or plumbing, illegal cantilevers, or under-insulated wall sections," he says. The learning curve for drafting basics and program functions may be too arduous for even the most optimistic consumer, he adds. "So delighted are customers when they finally get the software to pump out a rendered design, *any* design, that they rush off to get a contractor's quotes. How much time has been spent on actually thinking about the building site, their lifestyle, the budget, proportions, materials, colors—in short, the architecture?"

Ultimately, the real value of a home-design program is the ability to visit many versions of your house before deciding, says IBMNET sysop Jim McKeown, who utilized TurboCAD in considering 100 different plans for four different property lots. The ease with which he could copy pieces of drawings into other drawings, and arbitrarily move drawing sections and have other dimensions automatically adjust, was key. "The real savings is in modifying plans—CAD made things very easy compared with having to redraw or erasing part of the plan," he says. "We could also keep copies of various versions to go back to and refine."

Here are several shareware home-design titles available online. To learn more about CAD home design, visit the "Computers & Houses" section of the Family Handyman Forum (GO HANDY-MAN), the "Computers/CAD" section of the Homing Instinct Forum, or the "Engineering/CAD" section of the Macintosh Applications Forum (GO MACAP).

Design-a-Room—Windows program to draw a room, add furniture and fixtures to exact dimensions, then move pieces around to your heart's content and print the result. Windows Shareware Forum (GO WINSHARE), Library 10, "General Windows Applications," DES23.ZIP (184,539 bytes).

Home Plan 2.5—Chuck Herndon's DOS drafting program draws floor plans quickly and easily, and includes pre-drawn furniture and appliances; auto-dimensions; square-footage calculation; onscreen "odometers"; and context-sensitive help. Zenith Forum (GO ZENITH), Library 6, "DOS Applications," HOMEPN.ZIP (120,852 bytes).

MacConcept—A 3-D CAD-type drawing program for the Macintosh. Manual comes with registration. ZiffNet/Mac Download & Tech Support Forum (GO DOWNLOAD), Library 1, "Applications," MACCON.SIT (147,840 bytes).

—Christopher J. Galvin



Architctural proposal via CAD: Belgian home



Designing modern living: Rendering of interior



BARTON COTTLE

Fix-it-yourself aficionado: Thompson

with his father in their architectural bureau, Archimago, insists, "To be in control, the owner must understand how the house is built."

Regardless of which philosophy members adhere to, they can find appropriate help online in two new forums: the Homing Instinct Forum (GO HOMING), staffed by architects and builders from the Yestermorrow Design/Build School, part of the Time Warner area online, and the Family Handyman Forum, frequented by contractors, electricians, plumbers, and housing inspectors.

Membership in the forums overlaps significantly, but the simplest differentiation between them is that Family Handyman is most concerned with *how* to effect repairs and small-scale renovations, and Homing Instinct with *how* and *why* to design or build from scratch. Nonetheless, both forums are devoted to putting the homeowner firmly in charge.

For example, the Family Handyman Forum's libraries are filled with articles from back issues of *The Family Handyman* magazine that spell out the basic dos and don'ts of plumbing and wiring, as well as teach how to build a deck, mend a broken countertop, or paint wood paneling.

Steven Frank took advantage of the Family Handyman Forum to learn more about electrical wiring. This family-practice physician from Providence, Rhode Island, recently purchased a 70-year-old house with antiquated wiring that wouldn't support his computer and other equipment that used three-prong plugs. Frank decided to upgrade the ungrounded single electrical outlets to grounded duplex outlets. His prepurchase house inspection indicated the electrical service of 100 amps was equipped with circuit breakers and was properly grounded, but he needed to know how to check the individual boxes for proper grounding and to perform the upgrade safely.

Although he had previously added new wiring and outlets to other houses, Frank knew he was no electrician. Still, determined to learn how to do it himself instead of hiring

a professional, he sought help from licensed electricians in the forum. Not only did he learn how to meet safety-code requirements, but he also picked up special techniques that made the job easier.

Another topic frequently discussed in the forum is which tools beginners need for their fix-it jobs. The basics include hammers and nails, screwdrivers and assorted sizes of screws, a 25-foot measuring tape, and a reversible electric drill. Forum member Warren Hazelton, a homeowner in Prairie View, Illinois, who learned fix-it techniques as a boy watching his father, also recommends a circular saw for carpentry work, such as building a deck or cutting lumber or plywood; a level to help hang things

straight on walls—be it pictures or shelves; and combination wrenches for assembling, repairing, and tightening everything from bicycles to lawn mowers and deck bolts to ceiling fans.

"Buy tools as you need them. This will mean a lot of trips to the store at first, but you won't get stuck with stuff you won't use," he advises.

Once homeowners master basic repair techniques, they often strive for more control over their homes by embarking on a project such as remodeling the bathroom, installing new kitchen cupboards, or finishing a basement or attic. To truly have control, however, they must eliminate as many in-between people such as contractors as possible.

"Resist the trap of relying on others to



BARTON COTTLE

Renovation's charm: Victorian staircase

How to Hire a Pro

When you can't do it yourself, hire a professional. Choosing the right person for the job takes a little time and effort, but shopping around is well worth it, especially for bigger projects such as remodeling.

Building-industry pros and Homing Instinct Forum (GO HOMING) members Robert Roland Bryce and Michael O'Brien offer these tips on how to hire a pro:

Do your homework: plan. When you can describe in detail the job that needs to be done, you'll get more specific, realistic bids. Resist the impulse to plunge in headfirst.

Ask friends, family, and co-workers for the names of tradespeople with whom they have been satisfied.

When interviewing for a job bid, ask the worker these questions: Are you insured? How long have you been in business? Are you licensed? Has anyone ever sued you or filed a complaint against you? How long will the job take? Are you too busy for this job? How many projects are you working on now? How long before you can start work? When do you anticipate completion?

Demand a list of all clients over the past two to three years or more. Call everyone on the list. Remember, the best tradesmen have regular and steady work with local builders.

In the United States, consult the state agency responsible for regulating the worker's profession to see if any complaints have been filed. Also, consult the local Better Business Bureau.

Visit the local courthouse to see if anyone has filed suit against the worker or his company.

Ask for addresses of houses the worker is currently remodeling, and then visit the sites. Ask the owners' opinions about the quality of the work.

Don't ever choose the lowest bidder. You get what you pay for.

Hire only those who are licensed and bonded.

If you have the least suspicion, stay away.

Don't ever start a job without a written contract. This will spell out what will be done and the materials used.

If you decide to change some aspect of the job, write up a change order. Don't make the changes verbally—get them, including the cost, in writing.

Always hold back some funds until the job is completed. Never pay in advance, and when possible use a credit card, as your consumer rights are better protected.

Hire a professional inspector before you make the final payment.

—Cathryn Conroy

Giving Your House Computerized Smarts

For the past eight years, Mark Selesky's Batavia, Illinois, home has had some unusual quirks: When Selesky, a professor at McDonald's Hamburger University, and his family leave home, music and lights come on and off randomly. The ceiling fan in the master bedroom will work only if either he or his wife is sleeping and the room temperature is more than 75 degrees F. At dinnertime, a kitchen light comes on and shuts off the television, regardless of whether his children's favorite program has ended.

Is this house possessed by highly particular demons? Actually, it and thousands of other homes are being "managed" by one of an increasing variety of automation systems. These customizable systems can control basic lighting, room-to-room temperature and humidity, stereos and appliances, and even serve up a gadget lover's dream: timed electric window shades or sprinklers, or a complete fire, gas-leak, and burglar security system that calls you at work (plus the police or fire department) if activated.

Hand-held remotes, touch-tone wall keypads, preprogrammed schedules in your home's computer "controller," and infrared interfaces in audio/visual equipment provide the means toward achieving automation, but, oddly, this hasn't brought a rush of consumers. Despite the safety, convenience, and energy savings users claim, the industry hasn't broken out, says Russell Salerno, an automation devotee. "It's never been successfully marketed. Despite its being around for at least 10 years, most people don't even know it exists, let alone how enjoyable a good home-automation setup can be," he says.

The lack of an agreed-upon standard has kept the high-end systems high-priced—more than \$20,000 for some custom installations—and kept sales down, adds Salerno. "Home automation really needs a DOS or MIDI-like standard to get going."

Two of the "standards," Smart House and CEBus, haven't fared as well as hoped. Smart House systems require new home construction or expensive retrofitting of existing homes with special cabling; CEBus, based on smart chips for appliances that talk to each other instead of a controller, is a promising entrant but has been mired in industry haggling. Its products are only beginning to hit the market. "CEBus has the potential for controlling the most minute details—imagine muting your stereo when you open the refrigerator door, but only if the ice tray is empty and your clock radio is set for 7:30 A.M. That's the kind of integration CEBus will bring," says Salerno.

Most CompuServe members bitten by the home-automation bug, however, prefer what seems to be the hobbyist's standard: X-10. Dating from the early 1980s, X-10 utilizes the existing electrical wiring in your house, plug-in modules or replacement

outlets that send and receive signals for device control, and various optional computer interfaces that permit the programming of "event" schedules into the memory of a dedicated computer or stand-alone units such as the CP290. The standard's affordability (one lamp module can retail for \$8), ease of use, and scalability are big pluses for the do-it-yourself crowd, says Graphics Forum (GO GRAPHICS) sysop Matt Drury, an X-10 user. "A good core system can be as simple as a controller from Radio Shack. It offers flexibility and growth, with no major investment up-front or during expansion."

Many members of the Consumers Electronics Forum (GO CEFORUM), which features a section on home automation, have practical or intriguing uses for X-10:

- Mark Genovese schedules the start-up of his coffeemaker, as well as the gradual increase of lighting in his bedroom, to help him wake up. Motion sensors turn on hall lights to light the way. He's working on installing interfaces in his washer and dryer so that they send signals to "chime" units elsewhere in the house, alerting him to the end of each appliance's cycle.

- John D. Grob has X-10 modules controlling "most everything" in his home, including a chime unit on the computer, where he admits spending too much time. "When my wife wants me to come to the garage, basement, or wherever, she presses 5 on any control panel she happens to be near," he says. "As good as a puppy, I come a-runnin'."

- Scott Silverman keeps his pet birds entertained with an X-10 system running off a Macintosh. A nearby radio is turned on and off during the day, and lights come on in the evening hours. Silverman even used the system to train his African Grey Parrot to talk: "I bought an endless three-minute tape and recorded some words on it, then connected a tape player to a module and had it go on for a few minutes every hour. It worked—the bird began repeating the tape!"

X-10, while inexpensive, is not problem-free: modules regularly and irreparably break down, and the CP290 interface for PCs is called "crude" by many, though it's easily replaced by one of the more user-friendly shareware programs (for DOS, Windows, and OS/2) online. But after you've lived with any kind of home automation, it's hard to live without it, says Bruce De Vries, a consultant with a company that makes voice-activated products which are ideal for disabled homeowners. "I feel weird when I'm away from home and actually have to get out of bed to tinker with light switches and environmental controls."

—CJG

dictate what is best for you. This requires being proactive and taking charge of your home," says Family Handyman Forum member Alexander Safer of Chelsea, Massachusetts. He suggests homeowners do much of the work themselves, and hire the best pros they can find.

A condominium owner, Safer decided to remodel his bathroom. The first step was to conceptualize how he wanted it to look. The bathroom was small, and the large vanity under the sink and patterned vinyl floor only made it look more cramped. Safer wanted to expand the feeling of space, opting for an elegant pedestal sink and a highly polished wood floor. Unable to find just the right mirror, he had a picture framer assemble a beveled mirror with gold frame to match the

solid-brass fixtures.

To get the best price on supplies, Safer told merchants about his remodeling plans. When he went to a lighting store for the bathroom light fixtures and told the salesman he was remodeling by himself, he was given the price offered subcontractors, saving a lot of money.

He likens remodeling to an artist's palette. "Each color of paint is one of the jobs that needs to be done as you create your own painting. It's best to do it in layers. Look at the lighting, the sink, the fixtures, the floor. It's a long process, but I got what I wanted. If I had gone to a contractor, he would have shown me samples from a book. It wouldn't have been the same. It wouldn't have been what I wanted," he says.

FEATURE

Cape Cod-style house had an unfinished attic Phil was eager to remodel into usable living space. Although confident in his handyman skills, he knew he couldn't do it alone and hired a jack-of-all-trades contractor who agreed to work on a time-and-materials basis.

"We met with him and discussed our plans, emphasizing that we didn't want to pay him to do the job. Instead, I wanted to work alongside him to learn how to do the things we were going to do," says Phil.

Learning by the side of professionals is more common in Europe than in the United States. Architect Van Oyen says the best way to tackle a big project is to do it partially yourself with the help of a builder. "Let the builder pay you as an employee. You will learn a lot and have a pro as your instructor," he says.

Alfredo Alvarado, an assistant sysop in the Family Handyman Forum and owner of the handyman company Top Hat Services in San Juan Capistrano, California, advises homeowners to use what he calls the "play dumb" technique. "Ask a contractor or repairman questions that begin with 'What if . . . ?' or 'How would you do . . . ?' Many will volunteer their answers along with a business card. From there you can start a small database of home-repair tips and even exchange ideas with other homeowners."

With his professional handyman either by his side or on call, Phil framed the attic walls, dividing them into three bedrooms and a bath, wired the new rooms into the existing electrical circuits, insulated the exterior walls and ceiling, and did all the finishing work, which included installing the wall-board, painting, hanging the doors, and installing the bathroom fixtures and molding. Many of these tasks he learned as he did them for the first time.

The entire process took 18 months and cost Phil almost all of his free time. Every Saturday and many evenings he was in the attic, working. "It was a challenge having the burden of the job fall on me. Of course, we saved money, and I enjoyed doing it, but when things were going slowly, it was my



BEST LOOK STUDIO

Adapts old homes to modern needs: Leeke

fault. If you pay a contractor, mistakes and delays are his fault," he explains.

Planning is key for a project of this magnitude. "The more you plan ahead, the more you can take advantage of sales. The construction field is very competitive and volatile, so prices change often," advises Phil, who estimates he saved \$10,000 doing the job himself.

He and Alison are fearless now when it comes to home repair. "We're ready to take on anything, but we also have a more realistic view of how long and how expensive it may be. We were naive when we bought the house to think that six months of work and a couple thousand dollars would be enough," he explains. "Owning a house is an adventure."

The adventure gets more exciting when the house is old and requires major renovation. Some families find purchasing a run-down house and fixing it up themselves is less expensive than buying new. In addition, it offers them a chance to better shape the house to fit their needs. John Leeke, a preservation consultant in Sanford, Maine, and assistant sysop of the Family Handyman Forum, not only has renovated his own house but also makes a living helping homeowners, architects, contractors, and other tradespeople understand and adapt old and historic houses to the needs of modern-day living.

"Renovating an older house can save money if the house is in basically good condition, but there are other values to consider," he says, adding that these values center on preserving history and culture, be it national or family. "The built environment is our most immediate connection to our cultural heritage."

Renovation of his own house began 20 years ago, when he and his wife purchased the house, built in 1947—almost new by Leeke's standards (he frequently renovates 200-to-300-year-old homes). At the time, the couple could afford only a small house in the country, so "adapting it to efficiently meet the changing needs of our family and two home-based businesses has been critical to our success," John says.

The only affordable way for the Leeques to

Repair Safety Tips

Do it yourself, but be smart and do it safely. Heed these home-repair safety tips culled from the experts, Family Handyman Forum (GO HANDYMAN) sysops Roger Altman, Alfredo Alvarado, and Clay Thompson and Homing Instinct Forum (GO HOMING) sysop John Connell.

When it comes to preventing accidents, there's nothing like your own good common sense. Use it.

Avoid short cuts and be patient. Accidents occur when you rush to finish the job.

Wear proper eye protection. Whether you're installing a ceiling fan, cutting wood for a new deck, or framing your basement, wear safety glasses or goggles.

When needed, wear ear protection, dust masks, and gloves.

Be aware of the potential dangers of tools and read the safety labels on them.

Never use an unfamiliar tool. Ask someone to demonstrate it before you pick it up.

When working with electricity, never assume the circuit is off. Take an extra few minutes to properly test the circuit to be sure it is not energized. Inexpensive testers cost just a few dollars. Remember, shocks can be fatal.

When working with electricity outdoors or in wet areas, use a ground-fault-interrupter device to prevent accidental shocks. GFI protectors plug into existing receptacles and will protect you when you're working in that area.

Never work alone.

Just in case, keep a well-stocked first-aid kit on hand.

—CC



BEST LOOK STUDIO

Maine museum in repair: Victoria Mansion

Material Issue: Ensuring a Healthy Home

Your "home sweet home" could be "home toxic home," riddled with formaldehyde, cyanide, dust mites, and radon—substances that can make you sick even if you can't see, touch, or smell them.

"Most pollutants and allergens can be eliminated from a new building or remodel by carefully selecting materials, products, heating and cooling equipment, and appliances," says Michael O'Brien, a Portland, Oregon, builder who is part of the Sustainable Building Collaborative, which constructed a "healthy" home called the HERE Today house.

Building healthy doesn't have to be pricey. O'Brien says the additional cost is only about \$8,000 for a \$275,000 custom home.

Understanding what areas of your home might be toxic and knowing what to do to correct the problem are key to a healthy house, whether you're building from scratch or trying to "cure" an older home. Following are some important areas to consider:

Radon—This low-level radioactive gas is emitted from geological configurations and is a suspected cause of lung cancer. "Like oil or gold, you can't tell where you will find it until you dig. Even worse, you can't tell if you have a problem until the foundation is finished, because that is what traps enough radon to create a hazard," says architect John Connell, who is also sysop of the Homing Instinct Forum (GO HOMING).

If you anticipate a radon problem before building, Connell advises laying 8 to 12 inches of crushed stone under the foundation. Install in the stone a maze of four-inch perforated pipes that collect radon and vent it through a couple of vertical stacks running through the house to the roof.

Existing homes can be tested for the gas with kits sold in most large hardware stores for about \$15 to \$20. If a radon-removal system is needed, which could include using an exhaust fan or plugging basement leaks, hire an accredited radon-abatement contractor. Expect to pay \$50 to more than \$1,000.

Wood—Most houses are constructed of wood framing, and if the wood is pressure-treated, chances are it is saturated in a

toxic preservative made with heavy metals, copper, or cyanide. "While the common pressure-treated wood is considered safe by the housing industry, it hardly qualifies to be included in a healthy house," says Connell, noting that carpenters have long used masks and safety glasses when building with it. Instead, use wood treated with a nontoxic preservative, such as boron.

Try to use solid woods, such as pine, spruce, and oak. Avoid plywood and particle board, which contain adhesives that can "off-gas," or emit harmful chemicals.

Carpeting—Carpets cause two problems: they off-gas chemicals, especially formaldehyde, and they create a harbor for dust mites, microscopic insects that feed on dead skin particles that build up in homes. If you suspect your carpeting is making you sick, the obvious solution is to remove it. Install natural-wood flooring, but be careful the sealer doesn't cause chemical off-gassing, advises Robert Roland Bryce, an architect in West Bloomfield, Michigan, who designed and built his own healthy house. Look for a water-based, nontoxic finish for the floors.

Hardwood floors have another advantage: reduce the amount of carpeting and you also reduce the habitat for dust mites. If you have carpeting and suspect dust mites are causing allergies, purchase a vacuum cleaner specially designed to pick up mites.

If you prefer carpet under your feet, look for natural fibers, such as jute, cotton, and wool. John Leeke, a preservation consultant in Sanford, Maine, and co-sysop of the Family Handyman Forum (GO HANDYMAN), says carpeting in old homes is generally all-natural, since synthetic products weren't in common use until the mid-1900s. "Synthetic carpeting materials are suspected of causing illness due to gases that are released after installation," he says. Still, synthetic products are preferred by

the building industry because they are cheaper to make.

Walls—Every house has walls, and if they are drywall—a standard building material—they could be emitting formaldehyde. That distinct smell in most new homes as they are drywalled is formaldehyde, says Bryce. To avoid this, use plaster. It's also a higher-quality material, so you're likely to see fewer nail pops and will need to repaint less frequently.

If you must use drywall, finish it with a nontoxic joint compound and make sure the joints between the drywall and framing are sealed to prevent chemicals from migrating from structural cavities.

Natural Gas—If you cook with gas, properly vent the gas stove. "The use of an unvented gas stove will produce enough toxins to mask almost all the other off-gassed chemicals combined," warns Connell.

Gas fireplaces are good for the environment, but they must be properly installed and vented or they will be toxic. "A sealed-combustion gas fireplace keeps toxic fumes out of the living area," says O'Brien. "Gas exhaust pollutes the outdoors much less than wood smoke."

Common Sense—Here are other ideas for creating a healthy house: Store household chemicals and dangerous cleaning supplies in the garage rather than under the kitchen sink. When painting, choose a paint, such as Miller Paint, that does not contain toxic biocides. Reduce mold and mildew by wrapping the house in insulation and using highly efficient doors and windows to reduce moisture condensation. Install a ventilation system that filters incoming air and removes stale air-conditioning pollutants, odors, and excess humidity. Plant shrubs and bushes that need little or no pesticides or herbicides.

"I don't want you to think you've only got days to live, but we do live in unhealthy houses," says Connell, noting that the issue of house toxins was not even considered until the last decade. "How healthy and safe should we make our homes? This is a good question, and one that needs to be answered in a public forum."

—CC



BARTON COTTE

renovate was on a year-by-year basis, rather than all at once. One of the larger jobs the family tackled was reshingling the exterior walls, which involved presorting and dipping shingles in preservative as well as putting them up. The project was completed over two summers, which gave Leeke the time to earn the money to pay for the supplies as needed.

What's the payoff for this 20-year effort? Leeke estimates his housing costs are 50 to

70 percent less than if he had made a big, initial investment in a modern house or if he had hired professionals to do the renovation work for him.

While money may have been the motivator, in the end Leeke's satisfaction lies in the feeling of ease and comfort his home inspires. He takes great pride in the work his family have accomplished with their own hands.

FEATURE

"Every detail of appearance and operation fits me perfectly, since I designed and made nearly everything. If something doesn't fit, I change it. This is the real advantage of doing it yourself," he says.

For Linda and Frank Baldwin of Powhatan, Virginia, making renovations that preserved the architectural integrity of their 150-year-old house was

Sample Q&A From the Family Handyman Forum

Have a home-repair question? The place for the answers is the Family Handyman Forum (GO HANDYMAN). Here's a sampling of recent queries:

Q. My deck is covered in green algae and has suffered sun damage and neglect. What should I do?

A. Put a solution of one part household chlorine bleach to two parts water into a pump-type garden sprayer or watering can. Add one cup of detergent per two gallons and mix. Apply liberally and scrub. Let the solution run between the boards, and scrub around all exposed edges. This will kill moss, mold, and mildew and will remove the outer layer of dried-out wood cells. Rinse thoroughly with a high-pressure garden hose. Allow to dry thoroughly over at least three sunny days and then apply a liberal coat of a good exterior wood conditioner.

Q. I want to add 16-inch skylights in my living room's cathedral ceiling. I can't find 16-inch skylights, and I don't want to tear out the entire ceiling. Any suggestions?

A. Frame the opening the size you want, cutting away the drywall and rafters inside the frame. The whole ceiling does not come down—just the area where you are working. Install a “doubler” that measures two inches by the same thickness of your ceiling rafters between two adjacent rafters. Secure the cut rafter to the doubled rafter on both the upper and lower sides of the skylight bay. Velux, a skylight manufacturer, offers windows in a variety of sizes.

Q. How do I get rid of food moths that have invaded my cupboards?

A. To eliminate them you must find and remove the nest, which may not be in an obvious spot. Look in boxes of food—even those not yet opened, especially flour, cereal, and pasta. Moths can also be found living on dried pet food, mice and rat poisons, dried fruit, nuts, children's “macaroni art,” and dolls and animals stuffed with beans. Finding the nest is difficult and may be expensive if you need to hire an exterminator, but it's the only way to get rid of the moths.

Q. My house has been invaded by carpenter ants. A pest-control service has sprayed three chemicals on indoor walls, cracks, crevices, and the outside of the house. We still have ants.

A. The chemicals aren't killing the ants, plus they are a health hazard. Since ants are attracted to damp wood, look for a source of moisture, particularly in infested walls. Cut back bushes so none touch the house. Usually ants live in a house and eat outside. Follow the ant trails at dawn and dusk and build a better home for the insects by piling logs near their food source. Bury the ants under the wood.

Q. Wasps are eating my wood fence! I sand the parts they peel, but how do I stop them? Should I stain the fence?

A. The wasps are using your fence to make their nests. You will need to stain, treat, or paint the wood—this will make the wood unpalatable to the wasps.

Q. I'm getting married this fall. While my fiancée is picking out a \$200 china pattern, I'm writing a list of “real” gifts. Any ideas for this lifetime apartment dweller?

A. Here are some suggestions: hammer, drill, drill bits, screw-driver tips for the drill, worktable, plunge router, compound miter saw, small planer, nail gun, and random-orbit sander.

Q. Can I paint over one layer of professionally installed wallpaper?

A. No! The solvent in the paint will cause the wallpaper paste to release and the edges will curl. The wallpaper's ink is water-soluble, which will telegraph through the top coat of paint. In addition, the wallpaper seams will show through the paint, causing vertical lines around the room. You could prime the entire room with a white-pigmented shellac-type stain killer first, but the smell is strong and you'd still have the lines. Instead, strip the paper, and be certain to get all the adhesive off before you paint.

Q. My house's previous owner painted over wallpaper. The seams and the paper's texture show through the paint. I want to remove the wallpaper and repaint without damaging the drywall. Will a steamer work?

A. Remove the paint with a heat gun and then steam off the wallpaper. Don't steam until the paint is removed, or you'll spend a lot of time scraping. There are commercial products that most paint stores carry that make the steaming and scraping easier. Almost any will do as long as you mix one part product with five parts elbow grease and patience!

Q. I want to paint asbestos shingles. Is this possible?

A. Yes, and the results will last a long time if you do it properly. First completely clean the shingles and kill mildew using a power washer. If you are also trying to remove layers of old, peeling paint, do not use a power washer on asbestos siding; instead, use a garden sprayer. Soak the siding thoroughly with one part sodium hypochlorite bleach to three or four parts water, plus a quarter cup of household detergent per gallon. Rinse thoroughly.

When dry, prime with an oil-based exterior primer. Allow it one week to dry, and apply two coats of an acrylic latex house paint.

Q. I've purchased a \$40 torchère lamp with a 500-watt halogen bulb and dimmer. I've also installed an exterior halogen fixture. These expensive bulbs burn out in just a few weeks. What's wrong?

A. One of three things may be happening:

1. If the envelope of the lamp was handled, fingerprints could cause differential expansion of the quartz tube, cracking, and burnout. Handle with cotton gloves or a clean handkerchief.

2. If condensation collected in the fixture box, it could cause the quartz envelope to crack.

3. High-line voltage could shorten the bulb's life. Measure it and have it corrected by your utility company or an electrician.

their top priority. They could realize their dream house only if they attended to every detail themselves. “Old homes should be restored as close as possible to the original. The house itself dictates what should be done, and it is our imagination that finds modern tricks to implement the restoration,” says Linda.

For instance, the original porch rails were shaped like violins, and the Baldwins hunted

for duplicates before making the necessary repairs. When they finally located a match, the materials cost an affordable \$2,500. Frank's father came to the rescue, copying the old ones using a band saw.

The Baldwins bought their \$45,000, 4,000-square-foot house on 36 acres in the Virginia countryside in the mid-1970s. They quickly learned restoration techniques, such as hand-stripping and refinishing pine

floors, through trial and error and by avidly studying what became their renovation bible, *The Old House Journal*. Before beginning new projects, they consult yellowed, dog-eared copies they've kept since 1976 for the detailed instructions and inspirational ideas they offer. Over the years, Linda estimates the couple have spent about \$100,000 on restoration and about \$50,000 on loan interest. “A really faithful restoration takes a

tremendous amount of blood, sweat, dedication, and money," she says.

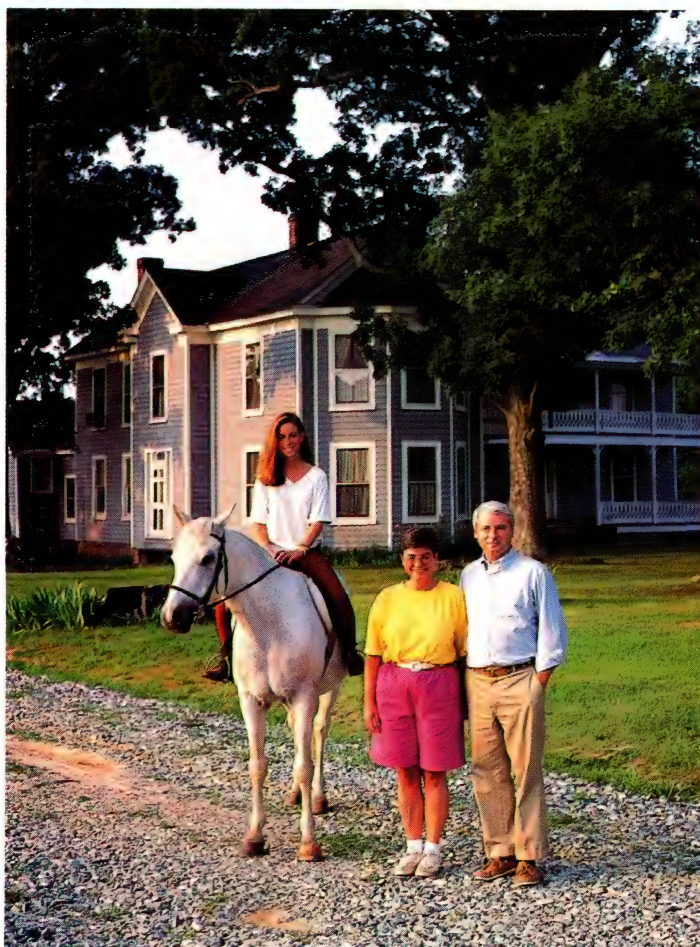
Linda freely admits the job will never end. For 17 years they have been rebuilding porches, installing central heating, fixing leaks in the slate roof, repairing chimneys, replastering walls, stripping the kitchen and a bathroom to the studs, and rewiring the electricity. Even so, 10 areas of the house still need restoring, including four hallways, two stairways, and four rooms.

While the musty smell of historic walls intoxicates some, others dream of designing and building their own house. "Your house is about how you live your life. The best way to get the house that's right for you is to become involved in the design-and-build process," says architect John Connell, sysop of the Homing Instinct Forum, founder of the Yestermorrow Building Group Inc. in Warren, Vermont, and author of *The Homing Instinct: Using Your Lifestyle to Design and Build Your Home* (Warner Books, 1993).

This is not a new concept—before the Industrial Revolution, those who designed houses also built them with their own hands. Connell transformed this idea into a philosophy for the '90s: each home is a personal expression that can best be achieved through involvement in every stage of the process.

When Jim and Nancy McKeown of State College, Pennsylvania, couldn't find a house they wanted to buy for the right price, they decided to design and build their own. After rejecting designs by the three full-time architects in the area, the McKeowns did the work themselves with the help of a part-time residential architect.

After poring over residential design books, the McKeowns concentrated on the internal layout to size the rooms and determine traffic flow. Since they were considering different land lots, they made several drawings so that the living and dining rooms would have advantageous views. They also



Let the house dictate when restoring 150-year-old dwelling: The Baldwin family

wanted a first-floor master bedroom.

They put all their ideas together using TurboCAD, an inexpensive computer-assisted drawing program that creates a house plan on an IBM-compatible computer with graphics-display capabilities, and a mouse. In addition to creating a plan with proper dimensions, TurboCAD allowed the McKeowns to erect computerized walls and remove them just as easily, resize rooms, and have all the other features adjust instantly to the new proportions. (See "CAD as CAD Can," p. 12.)


The McKeowns gave copies of their plans to their architect, friends, and family for critiques, which resulted in more design tweaking. "TurboCAD allowed us to be precise in our thinking, which might not have happened had we just depended on sketches," says Jim, an IBMNET sysop and an accounting professor at Pennsylvania State University.

With their dream house on paper, the McKeowns talked to general contractors. While the TurboCAD drawings were no substitute for architectural blueprints, they were precise enough for securing cost estimates.

Prospective home builders can still claim a design of their own without doing all of it themselves. Kate Murrell and Rich Sands bought a vintage-1940s house in Arlington, Massachusetts, with plans to transform its

outdated look into an ultracontemporary style they both preferred. The design work they undertook with an architect in charge involved more than just removing the blond wood-grain kitchen cabinets, pink floor tile, and matching pink countertops so popular 50 years ago. They also combined two bedrooms into a master-bedroom suite complete with an outdoor deck, whirlpool bath, and walk-through shower. While they have left all the actual work to professionals, they have maintained control of the planning and designing every step of the way.

"We didn't want to compromise on anything. When this is all done, it will be a house where every room will speak to us," says Murrell. Such benefits are the rewards for homeowners who take active roles in their homes, whether performing minor repairs, completing a renovation, or simply overseeing a contractor. The greatest benefit, however, may be peace of mind.

According to architect Connell, "We are wired to have a home base. We are not a nomadic people. We need to have a place that is the source of all our adventures and endeavors. Being in control of our home leaves us feeling secure and centered." 

FEATURE



Making a grand entrance: Porch in progress

Online Home Work Resources

Whether you're an old home-repair hand or a rookie do-it-yourselfer, you'll find expert help on CompuServe in a number of forums and research databases to help you turn your home into your castle.

Autodesk AutoCAD Forum (GO ACAD)

For those who want to design their own house or an addition, AutoCAD, the world's leading computer-aided design (CAD) system from Autodesk Inc., can make the job easier. Whether you want to create the final blueprints or just offer your own ideas to an architect, you'll want to participate in this forum.

3-D House—This LISP program creates 3-D buildings with separate layers for the roof, walls, and more, with door and window options. Public domain. Library 3, "LISP/Menu/Source," 3DHO2.ZIP (2,816 bytes).

Paper Model—Instructions for making a 2-D fold-out paper model of a house. Cut it out and tape it to make a 3-D model. Library 3, FLTHOU.LSP (1,934 bytes).

Smart House—Explains the cabling in a "smart house" home-automation system. Library 10, "Utilities," SHIS.ASC (3,567 bytes).

Consumer Reports (GO CONSUMER)

Locate articles from *Consumer Reports* dating back to 1990 to help you purchase high-quality, affordable products for your home and yard. Browse the Consumer Reports main-menu option 5, "Home," to find articles on air conditioners, garage-door openers, mulching, self-propelled and riding lawn mowers, interior latex paint, house paints and stains, and vacuum cleaners.

Information on a variety of home appliances can be found in menu option 2, "Appliances," including clothes dryers, dishwashers, garbage disposals, microwave ovens, electric and gas ranges, full-size and compact refrigerators, and washing machines.

Family Handyman Forum (GO HANDYMAN)

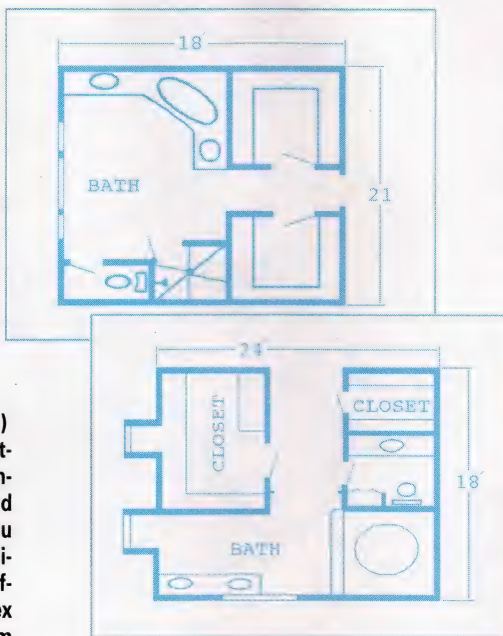
Staffed by the editors and writers of *The Family Handyman* magazine, as well as other home-repair and remodeling experts, this forum offers a wealth of information on everything from building a deck to repairing a leaky faucet. Selected articles from *The Family Handyman* are reprinted in the libraries. The message board is peppered with questions from homeowners wanting to learn the best and least expensive ways to fix-it themselves. Message-section topics include home and appliance repair, using and buying tools, remodeling, woodworking, heating and cooling, paint and wallpaper, and more.

Home-Repair Special—Cures for 12 common house ailments—silence a squeaky floor, make carpet look new, mend a broken countertop,

and more. Reprinted from *The Family Handyman*, September 1993. Library 2, "Home Repairs," HMREPR.TXT (18,048 bytes).

Showcase Deck—Step-by-step instructions for building a ceramic-tile deck with built-in planters, horizontal pipe rails, and a privacy screen. Reprinted from *The Family Handyman*, February 1992. Library 7, "Decks & Patios," SHOWDK.TXT (17,813 bytes).

Bathroom Remodeling—12 bathroom designs from simple powder rooms to master-suite baths with whirlpool tubs. Library 4, "Remodeling," BATHRO.ZIP (26,565 bytes).



Gardening Forum (GO GARDENING)

The first thing your guests see is your yard. If you need help sprucing it up, whether it's designing an environmentally correct landscape or seeking advice on reviving dying bushes, you'll find it in the Gardening Forum. Message sections on vegetable gardening, flowers, herbs, ponds, landscaping, houseplants, and lawns are filled with advice on turning your yard into a lush, green paradise. Gardening-industry pros are frequent guests.

Perennial Flowers—Tips on the care and selection of perennial plants and shrubs. Library 3, "Flowers/Roses/Bulbs," WS0294.ZIP (47,588 bytes).

Lawn Care—Lawn-care questions and answers by turf specialist Bob Boufford, including grass varieties, seeding, mowing, aeration, thatch, fertilizer, grubs, moles, zoysia, mowers, grass clippings, and much more. Library 15, "Lawns/Groundcover," LAWNQA.THD (76,848 bytes) or LAWNQA.ZIP (33,519 bytes).

A Natural Lawn—Tips on growing an organic lawn. Library 15, LAWNCA.TXT (6,142 bytes).

Homing Instinct Forum (GO HOMING)

If you're looking for expertise in landscaping, house building and design, construction, interior design, remodeling and restoring, kitchens and baths, computers and CAD, and "green" architecture, you'll find it in the Homing Instinct Forum. The sysop is architect John Connell, author of *The Homing Instinct: Using Your Lifestyle to Design and Build Your Home* (Warner Books, 1993) and an instructor at Yale.

Concrete and Foundation Basics—A primer on building a foundation, including slabs, frost walls, and full basements. Library 3, "Home Building," CONCRT.TXT (22,325 bytes).

Home Computer Network—An explanation of how to wire your home for a computer network using Ethernet, the LAN industry standard. Library 7, "Conveniences," COMPWI.TXT (3,602 bytes).

Oriental Rugs—A tutorial on buying an Oriental rug, including history, rug construction, types of rugs, and how to determine quality and recognize value. Shareware. Library 8, "Furnish/Decorate," RUGS.ZIP (24,584 bytes).

Information USA (GO INFOUSA)

Uncle Sam wants to help you with your garden. Type GO IUS-1731 for a listing of U.S. federal-government gardening resources for homeowners, including information on composting and improving your soil, gardening workshops, gypsy-moth control, indoor- and outdoor-pest identification, landscaping, plant care, and more.

Magazine Database Plus (GO MAGDB)

Search for and retrieve articles on virtually any home-repair and design topic from more than 130 general-interest magazines, journals, and reports. Specific publications include *Better Homes and Gardens*, *Consumer Reports*, *Consumers Digest*, *Consumers' Research Magazine*, *The Family Handyman*, *Flower & Garden Magazine*, *House Beautiful*, *Metropolitan Home*, *Mother Earth News*, and *Organic Gardening*.

To search for articles of interest, use the keyword that best describes your topic, such as HOUSE AND PAINT or HOUSE AND REMODEL. In addition to the extended-services connect-time charges, each article viewed online or downloaded is surcharged at \$1.50. All articles are full-text.

"Fireproof Your Home: Protect Your Family and Home With Simple Fire-Prevention Tips," *Mother Earth News*, Feb./Mar. 1994, no. 142, p. 60. Reference #A15001323.

"Great Space-Saving Ideas for Your Home," *Consumers Digest*, Sept./Oct. 1993, vol. 32, no. 5, p. 70. Reference #A13265563.

"Renovation: What's It Worth?" *Metropolitan Home*, Sept./Oct. 1993, vol. 25, no. 5, p. 28. Reference #A13243497.



ROBIN JAREAUX

Thinking Gig

COMPUTING SERVICES

CM's Computing Services Credo: Exceed the speed limit, boost power, refresh your memory, squash bugs . . . from bootup to shutdown, our global tech team helps you get with the program.

▼
Running Up Your
Data Repository

▼
Shareware With
Something Extra, p. 24

► **With applications and data files hogging megabytes, upping your storage may be in order.**

Sooner or later it happens to everyone. That spacious new hard drive that echoed like an empty room a couple of years ago now feels as crowded as your grandmother's attic, stuffed with dusty items that haven't been used in years.

It's the Elementary Law of Computer Physics, according to David Seiver, a CompuServe member from Upper Darby, Pennsylvania. "Software will eventually fill all available storage space. It matters not whether you have a 360K floppy or a 250MB hard drive, you will eventually place every bit of software you obtain on it."

Determining the right cure for the overstuffed-hard-drive blues depends on your needs, your budget, and even your personality. The no-cost, low-tech solution is simple: regular housecleaning such as deleting unused files and applications. Another approach is disk compression. Utilities such as Stacker stretch disk capacity by shrinking the files

you put on it. But such solutions are only temporary.

For most users, easing the space squeeze means increasing the amount of storage space—the electronic equivalent of building a new closet. There are lots of storage options, however, so considerations abound. "The options for solving storage problems are varied, and the direction one goes in depends on need and budget," says Dave Balderstone, a Desktop Publishing Forum (GO DTPFORUM) member and an electronic prepress manager for a commercial web printer in Edmonton, Alberta.

High-density, multi-platter hard drives (from 200MB to 2GB) are still the storage medium of choice, but other products exist or are emerging. Technologies with an increasing share of the storage pie include removable cartridge drives such as Syquest and Bernoulli; magneto-optical drives that write data on a cartridge plastic disk using a laser; removable hard drives often used in laptops; and "floptical" and Very High Den-

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sity Floppy (VHDF) drives, which read special 3.5-inch diskettes.

Before you start shopping for storage media, Balderstone suggests that you ask yourself three questions: How much money can I spend? Do I need active storage or archive space? Am I exchanging information with others using different formats?

If you simply need more space to put applications and files you use regularly, additional hard-disk space is probably the solution. When selecting a new hard disk, you have two choices—an IDE drive or an SCSI drive—based mainly on how the disk is connected to the rest of the system. Most PCs are equipped with IDE hard drives, although some of the newest models come with SCSI drives. Adding a second IDE drive usually involves simply installing and connecting the additional hard drive to the existing hard-disk controller in the PC.

SCSI (Small Computer System Interface) is a standard for connecting peripherals to PCs, and is used not only for hard drives but also for removable storage devices (tape or cartridge), as well as other peripherals, such as CD-ROM drives. Installing an SCSI drive in an IDE-based system requires putting in a separate controller card and sorting out interrupt conflicts and competing drivers—a process often time-consuming and confusing. The advantage is that users can link, or “daisy chain,” up to seven peripherals to that one SCSI controller.

“New IDE hard disks are cheap—less than a dollar per megabyte—and are very fast,” says Richard D. Minnick II, an Adobe Forum (GO ADOBE) member and a PC printer specialist at Ford Motor Co. in Dearborn, Michigan. “Many desktop systems allow two IDE hard disks, so adding a second unit is possible.”

Minnick also advises storage buyers to purchase at least twice as much disk as is necessary. “It takes a lot of time to modify the system, so there is no point in a modest solution—such as adding only 200MB—that might be regretted later on.” In other words, don’t get trapped into buying for the short term and then having to buy the same item several times.

Desktop publishers, graphic artists, multimedia consultants, and others who use very large files have complicated storage needs. For example, graphic artists send files to service bureaus for slides and printed output they don’t have the technology to generate. Design consultants often store large image or video files they need to access occasionally. For them, removable media such as Syquest or Bernoulli, tape, or even writable CD-ROM drives are the preferred choices.

Heidi Waldmann, a Desktop Publishing Forum sysop and a graphic designer in St. Paul, Minnesota, tried many options before she found the right solution. She graduated from a single 200MB drive to a compressed 200MB drive. When the compressed drive

became overloaded, she uncompressed it and added a 345MB hard drive. “It didn’t take too long for that to get full, even though I remove client data files to floppies as soon as they’re complete,” says Waldmann.

Finally, she chose the Bernoulli Transportable 150. While she usually sends files via modem to service bureaus, Waldmann wanted the option of sending them on disk. “Removable media means unlimited storage. The media could be used at a service bureau that has a Bernoulli drive—or I could take the whole Transportable in and attach it to the bureau’s SCSI chain,” she says.

Maryann McCourt was an early adopter of magneto-optical storage technology two years ago, and still thinks it was “one of the best investments I have made in equipment” for her Pembroke, Massachusetts, document-design consulting business. McCourt found keeping the hundreds of document files she maintains for clients compressed on 40 high-density diskettes too disorganized for editing purposes. “Too much time was spent locating files on diskettes, copying them to the computer, and then updating them. Now, these hundreds of small documents are on one 128MB drive,” she says. Backups to optical disks are a “breeze,” especially with the use of automatic-compression and file-synchronization utilities such as AutoDoubler and CopyDoubler: “I usually back up a 100MB partition with a thousand files. That used to take a long time, but now I get a report that only 100 files were different and copied,” says McCourt.

The low cost of optical diskettes lets her use four disks for backups, two for clip-art graphics, four for individual clients, one for special business and marketing files, and another disk for a holding system and diagnostic software. “I couldn’t justify buying a hard disk just for clip art, but at \$35 per



Online Storage Vendors

Look in the following forums for online support from storage vendors:

Hewlett-Packard Systems Forum (GO HPSYST)

Hewlett-Packard (tape drives), Section and Library 2, “HP Mass Storage.”

IBM Hardware Forum (GO IBMHW)

Seagate (hard drives), Maxtor (hard drives), and Syquest (removable cartridges), Section and Library 1, “Disk/Disk Utils.”

Colorado Memory Systems (tape drives), Conner Peripherals (hard drives), and Western Digital (hard drives), Section and Library 4, “Gen. Hardware.”

IBM Storage Systems Forum (GO IBMSTORAGE)

IBM (hard drives), Section and Library 1, “Adstar Distributed Storage Manager,” and Section and Library 2, “ADSM Special Progs.” Private sections are open to registered users of IBM storage products.

Macintosh C Vendor Forum (GO MACCVEN)

Iomega (Bernoulli cartridge drives, floptical and tape drives), Section and Library 8, “Iomega Corp.”

PC Vendor D Forum (GO PCVEND)

Micropolis (hard drives), Section and Library 5, “Micropolis Corp.”

PC Vendor E Forum (GO PCVENE)

Iomega (Bernoulli cartridge drives, floptical and tape drives), Section and Library 3, “Iomega Corp.”

Stac Electronics Forum (GO STACKER)

Stac Electronics (compression software), various sections and libraries.

Also, for help sorting out SCSI specifications or making sure you can daisy-chain your SCSI peripherals without irritation, check the IBM Hardware Forum or the Mac Hardware Forum (GO MACHW).

Hard-Disk Housecleaning: Programs That Save Some Space

There are a number of programs online that help you reclaim disk space that may be being used unnecessarily. Following are some choice uploads:

IBM Systems Forum (GO IBMSYS)

Wipe-Out—Removes unwanted Windows applications. Library 3, "General Utils," WIPE-O.ZIP (53,495 bytes).

Uninstall for Windows—Version 1.5 removes unwanted files and changes name and location of the output file. Library 4, "Multitasking," UN4WIN.ZIP (54,121 bytes).

FREEUP—A fast utility that searches the hard disk for the file specs you specify on the command line and deletes all matching files. Additional command-line switches allow you to delete each file interactively, display the file size, and search only current directory. Library 6, "File Utilities," FREE11.ZIP (44,499 bytes).

Macintosh Systems Forum (GO MACSYS)

PrefsCleaner—If you've ever installed an application only to remove it a short time later, you may have forgotten that its Preferences file remains in your System. This utility removes all redundant files in the Preferences folder. Library 7, "Utilities," PRFCLN.SIT (19,200 bytes).

TrashAlias—Removes any and all aliases associated with a file or folder being deleted, saving a few kilobytes of disk space here and there. Library 9, "Aliases/Icons," TRASHA.SEA (25,984 bytes).

Windows Shareware Forum (GO WINSHARE)

CLENZER—Cleans large, cluttered hard drives by providing two primary search mechanisms. CLENZER can either search for the largest

files on a drive or identify pesky disk-eating files such as READMEs. After a search, users can print or save a list of the search results or delete any of the retrieved files. Library 2, "File Apps/Utils," CLENZE.ZIP (1,428,199 bytes).

Windows User Group Network Forum (GO WUGNET)

Space Hound Disk Manager—Identifies duplicate, obsolete, or forgotten files. A printable Directory Map shows nested storage totals. Library 11, "WUGNET News/Files," SPACEH.ZIP (531,599 bytes).

CleanTTF—Removes unnecessary TrueType files from the System directory. Program will create an ASCII file containing names of all font files not needed and will optionally delete unnecessary files. Runs under DOS. Library 11, CLNTFF.ZIP (17,843 bytes).

optical diskette, having lots more space is no problem," McCourt adds.

Musician Robert Aries decided on the lower-end solution of a floptical drive, providing 20MB of storage on a 3.5-inch disk, for use with his Atari ST and Peavey digital-audio sampler. "The sampler has 10MB of memory, and it usually takes 3MB to 10MB of data to represent one instrument," Aries says. "Loading these files in from floppy disks can be very time-consuming. Flopticals solved the problem and gave me the added advantage of being smaller and more rugged than other removable storage media." Aries, who bought the drive for use with his sampler, found an added bonus for other computing activities: "I can back up my entire hard disk on a few disks, and when I need to transport my computer to recording studios, I can leave the external hard drive at home."

Photography Forum (GO PHOTOFORUM) member J. C. Bourque deals with very large files, from 25MB to 100MB in size, for his digital-retouching business in Miami, Florida, with a typical job generating several hundred megabytes in files. His storage needs are extreme. "I have to empty my 900MB working directory as soon as I finish a job, which can be every couple of days." He backs up his applications to Syquest cartridges, which can be restored quickly.

Daniel Katz, a Toshiba Forum (GO TOSHIBA) member and a businessman and student from Mexico City now living in Israel, uses a notebook for his primary system because he travels a lot. He upgraded from a system with a 120MB hard disk to the Toshiba 4600C/340 primarily because of the larger hard drive. But the larger drive is still not enough. "I use Stacker 4.0 with great compression," he says. And for backups or files he might need later, he uses a portable tape drive and four tapes.

Once you decide what capacity you need,

shop for the right price. Cyber Forum (GO CYBERFORUM) member Rich Wellner, a virtual-reality consultant from Chicago, Illinois, suggests taking the price of the drive (say, \$475) and dividing that by the storage capacity (say, 500MB) to get the price per megabyte (95 cents). "This figure can be used to compare different retailers and get the best value."

Bourque advocates the Syquest drive for users who generate lots of smaller text files or spreadsheets. "A Syquest 44 drive sells for about \$240, with about \$70 for two cartridges for redundant backup." Use one of the cartridges for backup; slip the other into a briefcase for off-site safety.

Protecting all the data on that huge hard drive causes its own storage needs. Backing up the contents of a hard disk onto diskettes used to be a manageable, if tedious, task. But no one wants to swap those hundreds of diskettes anymore. Tape drives are now the medium of choice for backing up ever larger hard disks. The two most common tape technologies—QIC (quarter-inch cartridge) and DAT (digital audiotape)—offer different benefits and costs.

QIC mini-cartridge drives, available in QIC-40 and QIC-80 formats, hold up to 250MB of data comfortably and are adequate for backing up smaller hard drives. Newer QIC-525 drives hold up to 500MB, with 1GB models on the horizon. For large hard drives and networks, DAT drives that can hold gigabytes of data are a better choice—both more convenient and less expensive than QIC drives.

Martin Schiff, a sysop in the Computer Consultant's Forum (GO CONSULT) from Maitland, Florida, had to change his backup system when he expanded his hard drives. He had two SCSI hard drives with approximately 1.7GB of storage capacity and used

seven tapes to back it up to his Maynard Mainstream 60. The process took well over an hour.

So Schiff started looking for a tape drive that would back everything up on a single tape. "I asked questions in the Consultant's Forum, did some reading, and decided that a DAT drive was the way to go," he says. "After

reading articles in Computer Database Plus to find out which drives had the best reviews and compatibility, I decided on a Hewlett-Packard DAT drive with hardware compression that would give me 4GB to 8GB of storage on a 90-meter tape."

If sharing tapes among systems is important, make sure the drives and software are compatible before making a purchase. DAT systems are proprietary—tapes recorded on one brand are readable only by drives of the same brand. QIC, now a standard adopted by all mini-cartridge-drive manufacturers, is supposed to allow data transfer between different manufacturers' drives, but it doesn't always.

"There is not one manufacturer that complies 100 percent with the QIC-80 specification," says Jeff Weiss, manager at Eternal Archive Solutions in Waterbury, Connecticut. He suggests that only preformatted tapes be used. If the tape must be formatted, do not use a high-speed controller (2.88MB diskette or 1-megabit-per-second speed) to format the tape. Make sure the tape drive is cleaned after every 20 to 40 hours of use.

Whatever your storage problem, coming up with the right solution takes effort. "There's no simple answer to cover all the bases, although each individual situation usually has one," says Balderstone. "In a group of computer propellerheads, you'll always get a variety of answers to the same problem, and generally a good heated discussion or two." ☐

COMPUTING SERVICES

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The Benefits of Bonusware

► Pay your shareware fees and you may receive freebies and support.

Shareware was built on the marketing concept of "try before you buy," an idea that works well, as long as the end user ponies up the registration fee. Persuading people to do the right thing can be done one of two ways: guilt and incentives. Because the former doesn't always work, it is the latter that is catching on, making "bonusware" the latest shareware rage.

When a guilty conscience isn't enough to get someone to write a check, shareware authors have learned freebies can do the job. These might include printed manuals, bonus utilities, free support from the author, access to a free bulletin-board system, and discounts on other products.

"It is very difficult to determine what makes people register," says Paul Brace of Wimbledon, United Kingdom, author of CDPlayer, an audio CD player for IBM PCs with a CD-ROM drive. "Is it simply that people are honest or is it the incentive? I would like to think the former."

Available in several forums, including the CDROM Forum (GO CDROM, Library 4, "DOS, Windows, OS/2," file CDPJ.ZIP), the \$35 program has been downloaded more

than 4,700 times in one year, which Brace credits to the incentives, which include a manual, free support, a free BBS service from which to download upgrades, and a bonus-program DOS TSR player. The inducements also help legitimize his company. "They show we are serious about our products and the shareware concept. It gives the user confidence."

Shareware incentives aren't new; such bonuses have long been used to encourage users to register. The Association of Shareware Professionals, an organization to which many shareware authors belong, enforces a fairly strict set of standards on incentives.

"These standards help members structure their incentives in positive directions, as opposed to negative ones, like 'crippleware,' 'nagware,' and the like," says Richard Harper, ASP president and owner of RGH Software in Reed City, Michigan.

"Crippleware" programs disable or remove essential features or functions from the evaluation version. Once the program is registered, the features are restored.

"Nagware" programs present frequent, disruptive, or obnoxious reminders to the

user to register. The hope is that the user will register just to get rid of the annoyances.

ASP often reviews its definitions of acceptable and unacceptable incentives so that it can keep up with the changing markets and needs of its membership without short-changing the customer.

"I think shareware will work with or without incentives to register, but it will work better if you give the customer that added enticement," Harper admits.

Scott Miller, founder and president of Apogee Software in Garland, Texas, took such incentives one step further than most shareware authors when he pioneered multi-episode games. Each game is divided into three or more episodes. The first episode, which is a complete game in itself, is released as shareware. To get the succeeding episodes, you have to mail-order them from Apogee. Other incentives include a hints line, bonus games, and cheat codes—all available only to registered users. For a list of all Apogee shareware games on CompuServe, search in the IBM File Finder (GO IBMFF) and ZiffNet File Finder (GO ZNT:FFD-1) using the keyword APOGEE.

COMPUTING SERVICES

The Success of Shareware Building

Selling one or two programs at a time isn't Rob Rosenberger's idea of how to get rich quick. Head honcho of Barn Owl Software, Rosenberger realized one way to sell hundreds of his shareware programs was to piggyback on software created by others.

It proved to be a good idea. Rosenberger licenses between 50 and 1,000 copies at a time of PCFDial, a 7K DOS auto-dialer for databases, to database firms that bundle registered copies of the program with their software. He strikes nonexclusive agreements with each company, allowing him to sell PCFDial many times over. The price to each firm is based on the number of copies licensed; the more that are purchased, the cheaper he sells it.

The benefit to commercial software companies is twofold. It is cheaper and more time-efficient to purchase shareware utilities to bundle with their word processors, spreadsheets, and databases than pay an employee to create one. "It's a lucrative way for companies to build better products over the long run," explains Rosenberger. "Just grab it and go."

Rosenberger also sells PCFDial to individual users through the usual shareware channels, including a number of CompuServe forums, such as the IBM Systems Forum (GO IBMSYS), Library 7, "Desktop Utils," file PCFDIL.ZIP. But while he has sold only about 1,000 copies to individual end users, he's sold 700 distribution licenses, which represents about 20,000 copies.

"Auto-dialers are a dime a dozen," he admits, which means he has to be an expert marketer to make his product stand out from a very competitive crowd. "As a shareware author you have to be more of a businessman than a programmer. You have to go out and hawk it."

One way he does this is to avidly read the classified ads in all the database magazines and send a letter to prospective corporate customers he spots there. Of the 200 or so he mails each year, he gets five or six respondents who want to buy. "I get my money back in spades," he says.

"As a shareware author you have to be more of a businessman than a programmer."

—Rob Rosenberger

—CC

Disagreeing with the basic tenets of the ASP, Miller says, "Shareware is not based on trust. Users will rarely pay for what they've gotten free as shareware, but they must be motivated by something they don't already have—in our case, more episodes."

Miller's strategy has worked well. Apogee is recognized as a shareware powerhouse, with 120 employees and contractors and annual sales of more than \$5 million. He unabashedly says, "It's the most successful incentive ever devised."

The more interesting the incentives, the more likely they will encourage that all-important registration. ZIPPER Payroll, which is available in the IBM Applications Forum (GO IBMAPP, Library 5, "Business Accounting," file ZPAC17.ZIP), is a payroll program for small businesses that includes federal and state tax tables for calculating withholding and other taxes. Author Ed Protas of Softcraft, a software-development company in Everett, Washington, offers not only what he calls "internal incentives"—a manual, technical support, tax-table updates for the following year, and a current release with bug fixes—but also "external incentives" he has created in conjunction with other vendors. These include a free introductory membership to CompuServe with a usage credit of \$8.95, a shareware copy of TAPCIS with a \$20 discount on its registration, and a 50 percent discount on a CD-ROM disc of shareware programs produced by shareware vendor JCS Marketing.

"Think of them as value-added incentives. I wanted to generate a little 'umph,'" he says. "Bonusware is just good marketing. How many boxes of cereal got sold because of the secret-decoder ring inside the box? How many Happy Meals does McDonald's sell because of the toy?"

However, Protas cautions that no matter how fancy the incentives, they won't help sell bad shareware. "The value of the inducements does not exceed the value of the program itself. No one will pay for a bad program, period! So the inducements will work only if the program has value."

He plans to expand his list of external incentives and hopes to reach a point where users will receive so many benefits just by registering, they wouldn't even consider not doing so.

Some shareware authors use the ultimate incentive: a better program. This doesn't necessarily mean the downloaded program is crippled—although some authors do use this negative incentive—it's just not as complete as the spanking-new one you'll receive in the

CompuServe's New Electronic Registration

The next time you purchase a new commercial software or hardware product, you may be given a chance to register electronically. Although you won't realize it, you may be using a new CompuServe service to do it.

Electronic Registration by CompuServe is a Windows-based software application that allows customers in the United States and Canada with modems to electronically register their software and hardware products via a toll-free number. Customized for each vendor, the program offers a series of screens that guides users step by step through the registration process. The program automatically dials

the toll-free number and sends the registration information to a secure CompuServe database to which the vendor has exclusive access.


The new, easy-to-use service provides commercial hardware and software manufacturers with significantly more registrations, lower costs, greater accuracy, and more satisfied customers. A beta version will be available for members outside the U.S. and Canada later this year.

Manufacturers interested in using Electronic Registration by CompuServe should call 800-524-3388 and ask for representative 573.

mail when you send in that check. Elizabeth Swoope of RoadRunner Computing in Baton Rouge, Louisiana, has tried this tactic with much success for her RRKeyFonts program for PCs, Windows, and German PCs (Desktop Publishing Forum [GO DTPFORUM], Library 9, "PC Fonts"; search for the program for your type of computer using the keyword RRKEYFONTS). Ideal for technical writing or documentation, the font includes a small drawing of all the special keys on a PC keyboard, such as Tab, Enter, and Shift, and allows them to be inserted into text graphically just the way they look on the keyboard.

The shareware versions of each edition contain a complete keycap font plus a "sampler" font. Pay the registration fee of \$49 plus \$5 shipping and handling, and Swoope will send you a disk with the complete fonts represented in the sample font file, as well as a manual with installation instructions and usage tips.

"I think the freebies are a good idea. They increase the perceived value of a product," says shareware fan Larry Ebbitt of Lawrenceville, Georgia. Still, if the program doesn't meet his needs, he won't buy it no matter what.

Known for offering targeted solutions for specific computing needs, shareware is different from commercial software only in the way it is marketed. Savvy shareware authors committed to the try-before-you-buy concept are finding bonusware works. 

Cathryn Conroy is senior writer of CompuServe Magazine. Her CompuServe User ID number is 70007.417.

See "Using CIM Shareware Registration," page 26.

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SATISFACTION GUARANTEED

How-to: Using CIM Shareware Registration

CompuServe's Shareware Registration allows you to do the right thing easily and register electronically for hundreds of shareware programs.

To register a program online using CompuServe Information Manager software, simply do the following:

Type GO SWREG.

Select your region for mailing purposes.

Click on "Register Shareware" from the main menu. Using the list of search criteria displayed, search for your program's description by registration ID, title, file name, author's CompuServe ID number, author's name, or keywords describing the program.

If your search yields too many programs, a menu of choices will help you narrow the search to a more manageable number. If you wish, the entire list of programs will be displayed or you can begin again.

Once the list is narrowed, click on "Display Selected Titles" to receive a list of programs in the database that meet your criteria.

If you need more information about the program, click on "More" to receive additional details such as forum location and file size.

To register the program, click on "Register." The system will prompt you for information, including your full name, company

name, complete address, telephone number, the number of copies you want to register, and disk size.

After you fill in the information, click on "Continue." A confirmation screen will appear.

To finalize the registration, click on "Register."

The shareware registration fee will automatically be charged to your CompuServe account.

"CompuServe's Shareware Registration is a service for both the user and shareware author," says Richard Harper, president of the Association of Shareware Professionals. "For the user it allows quick and relatively painless registration of shareware products. For the author, it provides an easy way to get payments from users who might otherwise not register."

Shareware Registration is especially valuable for purchasing shareware written by authors who live in a different country than the customer. No longer do users have to worry whether the shareware company will accept payment in British pounds, French francs, German marks, or U.S. dollars, since all payment is automatically charged to their CompuServe account.

For more information on this process see "Instructions to Register Shareware," on the Shareware Registration main menu. If you have questions or concerns about shareware registration, send a message to the shareware administrator by selecting "Provide Feedback."

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TECHNOLOGY UPDATE

500 miles from nowhere, it'll give you a cold drink or a warm burger...

NASA space flights inspired this portable fridge that outperforms conventional fridges, replaces the ice chest and alternates as a food warmer.

By Charles Anton

Recognize the ice cooler in this picture? Surprisingly enough, there isn't one. What you see instead is a Koolatron, an invention that replaces the traditional ice cooler, and its many limitations, with a technology even more sophisticated than your home fridge. And far better suited to travel.

What's more, the innocent looking box before you is not only a refrigerator, it's also a food warmer.

NASA inspired portable refrigerator.

Because of space travel's tough demands, scientists had to find something more dependable and less bulky than traditional refrigeration coils and compressors. Their research led them to discover a miraculous solid state component called the thermo-electric module.

Aside from a small fan, this electronic fridge has no moving parts to wear out or break down. It's not affected by tilting, jarring or vibration (situations that cause home fridges to fail). The governing module, no bigger than a matchbook, actually delivers the cooling power of a 10 pound block of ice.

From satellites to station wagons. Thermo-electric temperature control has now been proven with more than 25 years of use in some of the most rigorous space and laboratory applications. And Koolatron is the first manufacturer to make this technology available to families, fishermen, boaters, campers and hunters—in fact anyone on the move.

Home refrigeration has come a long way since the days of the ice box and the block of ice. But when we travel, we go back to the sloppy ice cooler with its soggy and sometimes

spoiled food. No more! Now for the price of a good cooler and one or two seasons of buying ice, (or about five family restaurant meals), all the advantages of home cooling are available for you electronically and conveniently.

Think about your last trip. You just got away nicely on your long-awaited vacation.

You're cruising comfortably in your car along a busy interstate with only a few rest stops or restaurants. You guessed it... the kids want to stop for a snack. But your Koolatron is stocked with fruit, sandwiches, cold drinks, fried chicken... fresh and cold. Everybody helps themselves and you have saved valuable vacation time and another expensive restaurant bill.

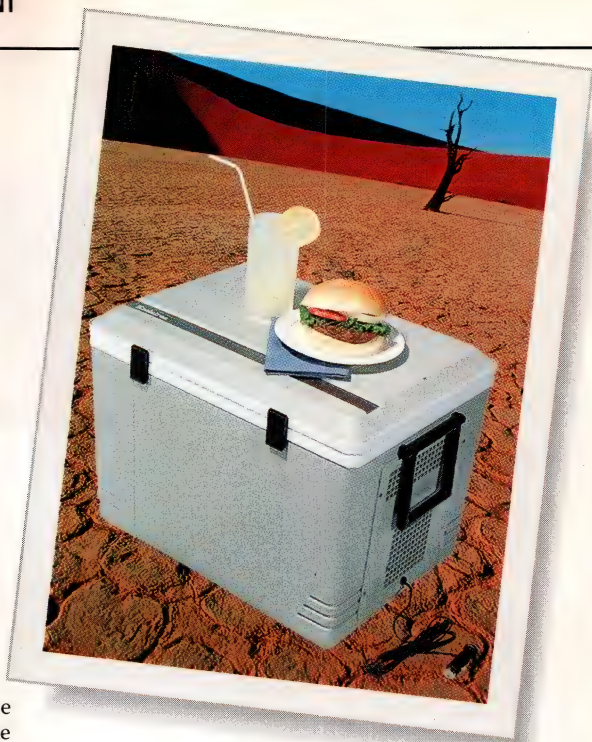
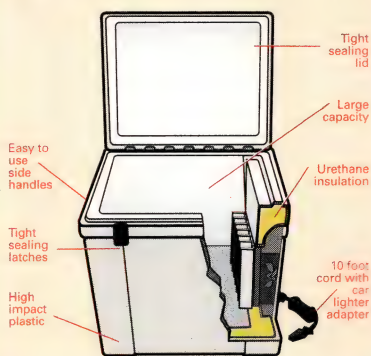
Hot or cold. With the switch of a plug, the Koolatron becomes a food warmer for a casserole, burger or baby's bottle. It can go up to 125 degrees.

And because there are no temperamental compressors or gasses, the Koolatron works perfectly under all circumstances, even upside down. Empty, the large model weighs only 12 pounds and the smaller one weighs just seven. Full, the large model holds up to 40 12-oz. cans and the smaller one holds six.

Just load it up and plug it in. On motor trips, plug your Koolatron into your cigarette lighter; it will use less power than a tail light. If you decide to carry it to a picnic place or a fishing hole, the Koolatron will hold its cooling capacity for 24 hours. If you leave it plugged into your battery with the engine off, it consumes only three amps of power.

The refrigerator from outer space.

The secret of the Koolatron Cooler/Warmer is a miniature thermo-electric module that effectively replaces bulky piping coils, loud motors and compressors used in conventional refrigeration units. In the cool mode, the Koolatron reduces the outside temperature by 40 degrees F. At the switch of a plug, it becomes a food warmer, going up to 125 degrees.



Limited time offer.

Because Comtrad is bringing this offer to you directly, you save the cost of middlemen and retail mark-ups. For a limited time only, you can get this advanced, portable Koolatron refrigerator at the introductory price of \$99. Call today to take advantage of this special promotional pricing. Most orders are processed within 72 hours.

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We guarantee your satisfaction with any product from Comtrad Industries. With the Koolatron you get our complete "No Questions Asked" 30 day money-back guarantee. Plus you get a full one year manufacturer's limited warranty. If you are not satisfied for any reason, just return the product for a complete refund.

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Koolatron (P9) holds 7 quarts.....\$79 \$8 S&H
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▼
Achieving Merchant Status

▼
What It Costs, p. 30

▼
New-Investor Advice, p. 34

► Taking charge-card orders will boost sales, but you can't come by the merchant title easily.

One of the best ways for any business to increase revenue is to offer customers the convenience of paying by credit card, but home-based entrepreneurs often can't enjoy this sales boost. Still perceived by banks that issue the merchant accounts needed for accepting credit-card charges as less financially secure and legitimate than their storefront competitors, home-based businesspeople find it difficult to obtain merchant-account status.

Credit-card fraud, run rampant in recent years, is primarily linked to telephone and mail-order sales—the mainstay of home-based businesses—whereby the merchant is unable to see the customer's card or verify a signature and can unknowingly accept stolen credit-card numbers. Because the bank which issued the merchant account is responsible for these fraudulent charges, banks are trying to protect themselves. They are scrutinizing companies that receive most of their orders by phone or mail more closely than ever.

Although difficult, getting a merchant account is possible, and the results are worth the paperwork. Michael Haschka of Camarillo, California, operates Graphic Impact, a home-based company that produces the program Windows Shareware Utilities.

Until he was able to accept credit cards, Haschka's only sales avenue was through mail order and CompuServe's Shareware Registration (GO SWREG). Once he was granted the merchant account, he changed his marketing techniques, promoting wherever possible that he accepted Visa and MasterCard—even within the shareware program itself. It worked. Haschka immediately started receiving credit-card orders placed by fax, electronic and postal mail, and telephone.

"The order volume from outside the United States practically doubled in the first four months, since there was no need for a common currency. U.S. orders increased 35 percent in the same period," he says. "Obtaining the merchant account was one of the best business decisions I have made."

If you want to secure a merchant account for your small or home-based business, you can apply through a bank or an Independent Service Organization that represents a bank and sets up the account.

While going directly to a bank will save you a bundle in fees because there is no middleman who needs to be paid, most home-based businesses will have to go through an ISO since banks aren't as willing to take on what is perceived as a risky business. ISOs, which charge higher fees than banks, function as the intermediary between the entrepreneur and the bank.

Cathryn Conroy is senior writer of CompuServe Magazine. Her CompuServe User ID number is 70007,417.

Home Businesses Beware: Choosing an ISO

Some ISOs indemnify the bank against loss, says Working From Home Forum (GO WORK) member Tom McSherry of Dearborn, Michigan, who arranges merchant accounts for home-based businesses. That is, if the merchant skips town or goes bankrupt, leaving a handful of fraudulent credit-card charges, the ISO will pay off the account. ISOs that offer this service are often allowed by banks to accept riskier businesses, including home-based businesses, since the only risk the bank carries is that of the ISO going out of business. Even so, the bank retains the right of final approval of all merchant credit-card accounts.

"Most entrepreneurs think a merchant account is as easy to get as a checking account, and they are really taken aback when they see just how much is involved," says Ken Phillips of Lubbock, Texas, an account executive for an ISO.

Whether you apply through a bank or an ISO, the application process is much like a loan, with the outcome based on the type of business you own, the length of time you've been in business, general creditworthiness, previous merchant-account status, and existing banking relationships.

You'll first speak to the bank or ISO representative, describing your business and giving credit-history information. You'll then complete an application, supplying personal data and trade references. Be prepared to discuss in detail how your business is financed, business-performance history, sales projections, your business plan, and personal credit history. The bank or ISO will draw up the contracts, which you will sign along with any other required paperwork. Finally, you'll pay the application fee and provide photographs of your office, to help prove you have a legitimate home-based business. Do include samples of your advertising, brochures, catalogs, and other marketing materials that demonstrate a professional enterprise. Merchant approval generally takes between one and three weeks.

Once approved by the bank, the merchant account will allow you to accept charges for Visa and MasterCard. Separate accounts must be secured for American Express and Discover directly from those companies.

The daily transaction process between you and the bank or ISO is simple. The credit-card-reading device or software that you lease or purchase from your bank or ISO will automatically track the amount of your sales and to whom they are made. At day's end, you electronically transmit this information to the bank or ISO. The bank will then deposit the funds into your account.

While it is difficult for a home-based business to secure a merchant account through a bank, it's not impossible. Because a bank's fees are so much lower (see "What

There are more than 1,400 Independent Service Organizations which serve as intermediaries between businesspeople and banks in the United States. Some are more reputable than others, so merchants beware. Although the credit-card industry is subject to banking laws and strict internal regulations enforced by Visa USA, it is largely unregulated. Questionable practices abound.

To find an ISO that will work with home-based businesses, ask your local bank for a referral or consult the Working From Home Forum's (GO WORK) Library 2, "Business Info," for the file VISA.HOW, which includes a listing of ISOs (and their representatives) that work with home-based businesses.

Tom McSherry, a Working From Home Forum member, who arranges merchant accounts for home-based businesses through ISOs, and Ron Stein, owner of MediaTech Innovations in San Jose, California, a home-based business with a merchant account through Cardservice International, offer this advice for choosing a reputable ISO:

- ▶ Check the company's reputation with the Better Business Bureau.

- ▶ What bank does the ISO represent? Make sure the ISO is placing you with one that has a good reputation and is large enough to serve your needs. Call the bank to make sure it is represented by the ISO. If there's a good bank behind you, chances are there's a good ISO in front of you.

- ▶ Does the money generated from your sales go directly from the bank into your account or does it flow through the ISO's pocketbook on its way to you? Look for an ISO that allows the money to go straight into the merchant's account.

- ▶ Look for signs of a professional operation, such as letterhead stationery, an office, and representatives who are courteous and knowledgeable.

- ▶ Does the ISO have a toll-free 800 number through which it issues credit-card authorizations? If not, be wary.

- ▶ Ask for references. Request a customer list from the past two or three years, a sufficient length of time to show the ISO has staying power. Check some of the references.

- ▶ Shop around. This is a competitive industry. Take advantage.

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What You'll Pay in Bank Fees

Merchant credit-card accounts don't come cheap, especially when you go through an Independent Service Organization. While banks charge less, they won't deal as readily with home-based businesses.

It's little known, but Ron Stein, CompuServe member and owner of MediaTech Innovations in San Jose, California, a home-based business with an ISO merchant account through Cardservice International, insists merchants can negotiate the myriad ISO fees.

Although fees vary widely, the following can be used as a guide:

Application Fee: \$95 to \$325. Some ISOs will refund part or all of this fee if your account is denied; others will not.

Deposit: Varies. If your business is unestablished or seems risky to the ISO or bank, you may be required to make a deposit to protect against customer chargebacks in case you fold up shop and disappear. Although this may not be required, you could be asked to plunk down the equivalent of one year's projected earnings.

Equipment: \$600 to \$1,700. To accept credit-card sales, you need a credit-card-reading device. The devices sell wholesale for about \$150, and ISOs make much of their money in the markup. Some ISOs will require you to lease the machine for about \$50 to \$70 a month, which adds up quickly. Other options include purchasing used equipment or buying PC software (\$100 to \$600) that will do the same job.

Banks will charge much less for the same equipment, with typical prices around \$300 for the reading device. Working From Home Forum (GO WORK) member Jim Green, who operates Williwaw Publishing from his home office in Anchorage, Alaska, secured a merchant account from his local bank. Other than the \$50

setup charge and \$175 to purchase the PC software needed to secure authorizations and upload sales, he paid no other fees.

Programming: \$25 to \$700 or more. The credit-card reader has to be programmed to automatically make the telephone calls needed to authorize a sale. This costs the ISO nothing, but you'll be charged a hefty fee for it.

Discount Rate: 2.5 to 7 percent. Charged by the ISO or bank for every transaction, this fee is computed as a percentage of every sale. The lowest discount rate a home-based business is likely to get is 2.5 percent, and rates much higher are common. For instance, Green, who secured his account through a bank, pays a discount rate that fluctuates between 3.6 and 4.25 percent based on his volume; Stein's ISO account is assessed 3 percent. What does this mean? If you get a 3 percent discount rate, 3 cents of every dollar you make in credit-card sales goes to the ISO or bank.

Per-Transaction Fee: 20 cents to 50 cents. Every time you make a transaction—be it a charge, return, or just sending in the day's receipts—you pay this fee to the ISO.

Customer Support and Services: \$10/month. Assessed for the toll-free 800 number you call for credit-card authorizations, this fee is not optional and not negotiable.

Monthly Fees: \$5 to \$15. Some banks and ISOs charge a monthly fee for a statement or to offset a low discount rate.

Monthly Minimum: About \$25. ISOs protect their financial stake by assessing a monthly minimum service charge. If you don't rack up enough fees from your sales, you'll have to pay the particular ISO's minimum.

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continued from page 29

You'll Pay in Bank Fees," p. 30), it is worth the time and effort to apply through your own bank first, whose staff know you and are familiar with your company. If possible, work with a banker who understands the nature of home-based businesses.

Jim Green of Anchorage, Alaska, and owner of Williwaw Publishing, did just that. He wanted to expand his sales of the *Alaska Weather Calendar*, a 12-month wall calendar with weather and climate information for Alaska and the Yukon Territory. Although it was selling well in local stores, Green wanted to increase his sales volume through telephone orders, so he needed a merchant account. In 1993 his local bank turned him down, but one year later, Green tried again.

"I told the bank I work from home and most of my sales would be telephone and mail orders," he says. Not wanting to complete the paperwork for an automatic rejection, he asked the bank manager for an assessment of his chances. "To my surprise, the banker said it was a good possibility. He said the bank was trying to change its conservative reputation and was accepting more mail-order businesses." Satisfied that Williwaw Publishing was a stable business after three years in operation, the representative told Green that as long as he had an office where people could come to redress grievances, he should qualify for the account.

After Green completed the necessary forms with a copy of the calendar attached, a bank representative came to his home to inspect and photograph his office. Within two weeks, he was approved.

Ed Verry, owner of Aspen Books & Software in Bozeman, Montana, sells books and software from his home-based office. Before he sent his first advertisement or catalog, he knew he had to get a merchant account or he would miss out on potential sales. Since his business was new and home-based, and relied exclusively on mail- and phone-order sales, Verry knew he was a weak candidate. Still, he was hopeful his local bank would support his new endeavor with a merchant account.

Verry decided to beef up his application, so along with the routine paperwork, he submitted a description of his business, a shortened version of his business plan, catalog samples, a recap of his professional experience, and applied with a co-applicant who became Verry's financial partner in the business. His application was approved.

"Any weak candidate should strengthen every aspect of the application. You may never know which part was the most important to the people who make the final decision," advises Verry.

If your local bank rejects your application for a merchant account, don't give up. Apply through an ISO.

Although your chances of approval are greater with an ISO, you'll still have to shop around for one that works with home businesses. McSherry says there are some 1,400 registered ISOs in the United States, but

very few will accept "non-standard" businesses, such as home-based ones.

A sterling personal credit rating will help you secure the merchant account from an ISO. "We check the personal credit history on everyone to see if there has been financial trouble. If there is, we don't issue the account. That may seem unfair, and it is in some cases; however, we must protect

ourselves," explains Michael J. Liberatore, another Working From Home Forum member who sets up home-based business merchant accounts through an ISO.

When software publisher Haschka was told by his bank that it didn't handle home-based businesses, he asked the manager for an ISO recommendation. Referred to Axin Financial Services Inc., Haschka says the process was "dead simple." After checking his personal credit report, an Axin representative visited Haschka in his home office, completed the application on-site, and took photographs of his office. Axin then linked Haschka with a bank that handles software publishers. He was approved in one week.


If an ISO is reluctant to work with you, encourage such a visit, as it may work in your favor, allowing you to prove you operate a legitimate, professional enterprise worthy of a merchant account. William Meisheid of Ellicott City, Maryland, who runs Sageline Publishing, a computer hypertext publishing company, did this with great success.

"I encouraged my ISO to come out and look at my home office to see what I do," he says, noting his application was easily approved by his ISO, Electronic Clearing House Inc. (ECHO), even though his volume of sales was projected at less than \$1,000 a month. He admits that without the visit he may not have been approved and that without the merchant account he would not have made most of the original sales that launched Sageline.

The biggest mistake business owners make when trying to get a merchant account is to lie. The ISO will check your credit rating; lying about problems or previous bankruptcy filings could mean you won't get the account—ever.

Liberatore has heard it all. "People lie about the type of business they are in. They will even say they are retail when they are 100 percent mail order," he says. When the deceptions are discovered, the businessperson is placed on the Terminated Merchants List. "Once you're on that list, you will never get another merchant account in this lifetime."

Disreputable ISOs, hungry for any business at all, have been known to falsify on behalf of merchants, unbeknownst to the clients, in an attempt to gain approval for an application that otherwise would be denied. "The end result is the same—termination and blacklisting. It is much more tragic when the merchant is innocent of wrongdoing and is forever denied another merchant account because the ISO representative lied," says McSherry. He advises all merchants to closely inspect applications completed by the ISO representative to verify the facts.

Securing a merchant account takes work and perseverance for a home-based business, but it is worth it. "Many businesses will not make it if they do not have credit-card capability," says Liberatore. "It is worth the struggle to stay in business." 

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Online ISO Resources

For more information on how a home-based business can secure a merchant credit-card account, check these online sources:

Magazine Database Plus (GO MAGDB)

"Merchants' Status: Rejected" (banks rarely grant home businesses the Visa or MasterCard option, but the climate is changing), *Home Office Computing*, July 1993. Reference #A13979247.

"How to Become a Credit-Card Merchant," *Home Office Computing*, December 1991. Reference #A11575624.

Working From Home Forum (GO WORK)

How to Get a Merchant Account—Several files containing message threads on how to secure a merchant credit-card account are available in Library 2, "Business Info": VISA.EXE (24,133 bytes), VISA.ZIP (11,349 bytes), MRCHNT.THD (10,799 bytes), CCARDS.THD (5,670 bytes).

Where to Get a Merchant Account—Information from sysops Paul and Sarah Edwards on how to get a merchant account, including a list of ISOs and their agents that work with home-based businesses. Library 2, VISA.HOW (11,783 bytes).

Increase Your Sales—Article by Jim Krause, president of Axin Financial Services Inc., on how a home-based business can increase sales by accepting credit cards. Library 2, CREDIT.TXT (4,461 bytes).

Why Accounts Are Hard to Get—Article by industry insider Ken Phillips on the difficulty home-based, start-up, and mail-order companies face in securing a merchant account. Library 2, MERNUM.TXT (9,415 bytes).

Insider Tips—Information from an industry insider on how home-based businesses can obtain and keep a merchant account. Tips on negotiating for best rates and sources for equipment are included. Sample chapters of the manual *Obtaining Merchant Accounts for High Risk Businesses*, by Tom McSherry, are in VISA_M.ZIP (35,330 bytes). The full manual (40 pages) is provided in encrypted form in VISA_M.EXE (51,100 bytes) and may be de-encrypted upon payment of a \$10 registration fee. Library 6, "Forum Help Files."



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Investing Time Before Money

► Stock-market neophytes should research and play before paying.

It's tough being a beginning investor, especially when many financial markets are fluctuating from all-time highs to record lows. However, novices shouldn't be discouraged. Experts say the key to long-term investing success lies in education and planning, regardless of whether the market hibernates like a bear or charges like a bull. CompuServe members use a variety of techniques to increase their market savvy.

Paul Goldberg, a Rochester, New York-based investment specialist for New England Securities and an active Investors' Forum (GO INVFORUM) participant, recommends that novices start by reading publications such as *The Wall Street Journal*, *Forbes*, and *Business Week* to gain general knowledge about the stock market and areas of their own interest, such as retirement or

real estate. Novices can also learn about how individual commodity markets react to changes in interest rates and which industrial sectors might be positioned to do well—or poorly—in the future.

Once novices begin reading about investing, they often need help interpreting market-specific information. When Cindy Tambolleo, a paralegal from Clinton, Massachusetts, wanted to learn to read the stock tables published in newspapers, she posted a note on the Investors' Forum. In response, a member suggested she consult a series of tapes by William O'Neil, author of *How to Make Money in Stocks* (McGraw-Hill, 1991). Tambolleo soon learned enough to ask a more complex question, concerning how to chart a specific stock. Another forum member suggested she try Microsoft's Excel software program, which

creates graphs that plot a stock's movement. Tambolleo anticipates using Excel as the next step in her investment education. "I plan to follow a few stocks before I even invest, so I can figure out how the market really works," she says.

Establishing a hypothetical portfolio before risking real money is a great way for beginners to test their investing skills. Harry Knutowski, an Investors' Forum sysop from Milwaukee, Wisconsin, recently developed a mock portfolio to test a theory that certain stocks battered over the course of the previous year might experience a further sell-off at year-end by shareholders who need a tax write-off, and then bounce back. Knutowski and Investors' Forum member John Sorenson chose three stocks—Rollins Environmental Services, Alza Corp., and Stone Container Corp.—which met this and several other criteria, and "bought" them after year-end dips in price. After eight weeks, the three stocks posted a 13 percent gain.

Noel Wasson, a management-information systems/software analyst from Hilton Head Island, South Carolina, also established a hypothetical portfolio by playing E*Trade's monthly online investment game, in which players receive \$100,000 in an imaginary brokerage account to buy and sell as many stocks as they want. At the end of every month, the player who has earned the most money receives \$50 from E*Trade.

After reading an Investors' Forum thread about a company called Enzo Biochem getting a new drug approved by the FDA, Wasson researched the company and then bought the stock in his E*Trade mock portfolio. It went up 77 percent in two weeks. Wasson found many of his E*Trade stock picks in press releases he received at work, but he always researched them further, even before buying them for his fictitious account. The game taught him the value of thoroughly researching a company's fundamentals before buying its stock. After six months on the forum and playing the game, Wasson decided he was ready to invest real money.

After discovering another biotech company called Chiron that interested him as an actual investment, Wasson sought information from Investors' Forum members. Four people responded with positive reports about the company's technology, financial picture, and a new product about to receive FDA approval. Wasson eventually bought 2,700 shares, and he's already made approximately

continued on page 36

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E*TRADE STANDARD ¹	\$25	\$25	\$25	\$25	\$29	\$29	\$38
BROWN	31	40	70	115	21	21	45
ACCUTRADE	48	48	48	90	35	35	45
WATERHOUSE	42	124	199	226	33	36	49
OLDE	60	100	150	205	40	40	65
QUICK & REILLY	77	128	171	171	41	46	61
PCFN	80	140	160	160	40	44	53
SCHWAB	100	166	221	221	41	46	61
FIDELITY	102	166	221	221	38	43	61
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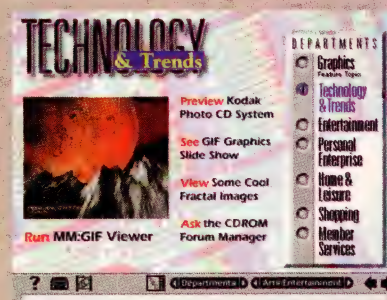


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Investing Interests: Online Resources for Learning

With nearly 70 U.S.-based investment and finance-related services online, it is difficult for novice investors to choose which ones best suit their needs. The following areas are the most helpful for teaching beginners about investing and aiding in their investment decisions.

Basic Quotes (GO BASICQUOTES)—Retrieve delayed quotes for items such as stocks, options, indexes, exchange rates, and mutual funds. Stock quotes include volume, high, low, and most recent trade, and an indication of any current news story on a particular issue.

Company Analyzer (GO ANALYZER)—Provides one-stop shopping for financial information. Enter a company's name, ticker symbol, or CUSIP number and the Analyzer will search various financial services to determine which contain data about the company you've selected. The Analyzer then builds a customized menu of the services offering information, which can include income statement, balance sheet, and stock-ownership information from Disclosure and Standard & Poor's, as well as estimates of future earnings from the Institutional Brokers Estimate System. The Company Analyzer menu also offers choices for price and volume graphs, pricing statistics, a detailed issue examination, and current news, when available.

Current Market Snapshot (GO SNAPSHOT)—Gives a picture of the current stock market by depicting key indicators in a concise one-page statistical report. It highlights current trading trends by presenting the highest, lowest, and latest values for the Dow Jones 30, Standard & Poor's 500, and NASDAQ Composite. Snapshot then defines the strength and breadth of the trend. This service also presents the value of the U.S. dollar in gold, yen, deutsche marks, and pounds.

E*Trade Stock Market Game (GO ETGAME)—Are you ready for Wall Street? Find out by playing E*Trade's game, in which participants are given 100,000 "dollars" to invest in game accounts. Choose to play the stocks-only game, the stocks-and-options game, or both. Participants have access to actual market data and prices, and the E*Trade computers track commission costs to make the game as realistic as possible. At the end of each month, the player in each game with the largest percentage increase wins a cash prize from E*Trade.

FundWatch Online by Money Magazine (GO MONEYMAG)—Sponsored by Money magazine, this comprehensive mutual-fund database allows you to screen and obtain reports about more than 1,900 professionally managed investment alternatives. Allows you to screen by numerous criteria to find the best-performing funds with the lowest expense rates. Detailed reports show how any of the funds have performed in the current

month, current year, and over one-, three-, five-, and 10-year time spans. FundWatch also gives the fees and expenses and a contact phone number should you decide to invest or have further questions.

Instructions/Fees (GO FINHELP)—Find immediate answers to commonly asked questions about CompuServe's financial services, information about session charges and product surcharges, and update times. Also allows you to give feedback about services offered online.

Investors' Forum (GO INVFORUM)—Meeting place for those interested in the world of investing, from stocks to real estate to insurance. Discuss individual stocks and market trends, download investment software, and attend real-time conferences with money managers, brokers, and individual investors.

National Association of Investors Corporation Forum (GO NAIC)—The association's goal is to educate long-term investors about how to find quality companies and buy stocks at good prices. Well-managed companies are identified from reported financial data and in-depth analysis. Members share information on portfolio management, software, and favorite stocks.

Portfolio Valuation (GO PORT)—Finds the value of a previously created portfolio for dates you select and displays unrealized gains and losses. Market prices updated continuously.

Price/Volume Graph (GO TREND)—Provides graphic presentations of both the historical prices and the trading volume for requested days, weeks, or months. Displays relevant information such as the current earnings, price, dividend, and risk information for common stocks along with the graph. You must have a computer and communications software that support graphics in order to use this service. Updated overnight.

S&P Online (GO S&P)—This service from Standard & Poor's Corporation contains recent information on 5,600 companies including business summaries, earnings outlooks, historical earnings, dividends, and product-line summaries. All information is dated to indicate when it was last reviewed. The S&P Master List presents buy recommendations for various investment objectives, and S&P Investment Ideas presents stocks that Standard & Poor's expects to outperform the market during the next 12 months. Updated each Tuesday night.

Search for Company Name, Ticker Symbol, or CUSIP (GO LOOKUP)—LOOKUP searches by name, CUSIP number, ticker symbol, CNUM, or SIC code and lists all the issues for a company you select. Displays the ticker symbol, CUSIP number, exchange code, SIC code, name, and description for each issue.



HOLUB/PHOTONICA

continued from page 34

40 percent on his investment.

"I find it interesting that a guy like me—who never thought about investing—could, through software and a few sessions online, increase my chances to make better investment decisions because I have more information. I didn't have to buy what a broker wanted to sell me, or what I saw on CNBC," he says.

Now, Wasson uncovers initial leads on promising investments in the forum and re-

searches them using Business Database Plus (GO BUSDB), which provides recent articles about a company from business and trade journals and newsletters, and Disclosure II (GO DISCLOSURE), which offers in-depth company profiles, including financial statements. But he warns, "The forum is an indispensable resource but needs to be used in conjunction with some other source."

Mike Pietruk, a Chicago-based Investors' Forum sysop, agrees, citing the forum's dis-

claimer, which explains that information found there isn't necessarily expert or even accurate. Pietruk recommends, "Rather than rushing headlong into anything, novices ought to begin serious long-term study of both themselves—goals, aspirations, financial needs—and the alternatives open to them. When they have a better understanding of both themselves and the markets and products, then—and only then—should they start thinking of committing actual dollars."

Another option for those who want to start investing "real" money is mutual funds,

PERSONAL ENTERPRISE

large portfolios of diversified stocks chosen by a professional manager. The advantage of such funds is that even if one or two of a fund's stocks perform poorly, the others can compensate for it. Investment specialist Goldberg advises beginners to invest a consistent amount of money every month into a diverse portfolio of mutual funds. By investing on a regular basis, novices avoid putting a large sum of money into the market right before a big drop.

Jim Giarrusso, an attorney from Flemington, New Jersey, began his investing career in mutual funds. "You don't have much choice as a beginner," Giarrusso says. "Mutual funds offer somebody to manage my money who knows a lot more about stocks than I do. Also, it gives me a way to own stock in 100 companies. If I own just one stock and it goes down, I'm in trouble." Giarrusso began by investing \$50 a month in the Twentieth Century Ultra Fund in his IRA, but he was so pleased with his returns (28 percent annually) that he raised the contribution to \$150 monthly. Over two years, he's diversified into six other funds and feels comfortable enough to begin buying stocks on his own because of his success in mutual funds and the market knowledge he has gained.

As to investment techniques, Giarrusso says, "I use Basic Quotes (GO BASIC-QUOTES) to keep up with prices, post investment thoughts in the Investors' Forum, and use *Money* magazine's FundWatch Online (GO FUNDWATCH) and Executive News Service (GO ENS) to find leads."


Neophytes seeking like company might also consider joining the National Association of Investors Corporation. Liz Hart, a Flower Mound, Texas-based sysop of the NAIC Forum (GO NAIC), says the organization is "all about investor education." It provides teaching materials on such topics as reading and analyzing companies' annual reports and prospectuses, comparing stocks, and managing a portfolio. It also oversees and advises investment clubs—partnerships of a dozen or so investors who pool their money (often \$20 to \$100 per member per month) and research to make good investment decisions on a regular basis.

Russell Jones, a parts-development engineer from Portland, Oregon, formed an investment club with nine co-workers at Precision Castparts with the help of NAIC. The employees wanted to pool their money for investing and chose to form an NAIC club because of the assistance it provides, including rules for governing a club, recommendations on conducting club business, and making actual investment decisions.

Jones attributes the NAIC Forum with helping the club get started. For example, he found a document in the forum library that offered sample partnership agreements for investment clubs at the same time he was forming the Precision Investment Group. "It helped being able to read about other people's experiences, especially regarding the club," Jones says. The club has bought shares

in nine companies, worth a total of \$1,500, and has earned 7 to 8 percent on its investment in only months.

The common requirement for all new investors, regardless of the option they choose, is being well informed. Knowledge of the stock market and the companies they consider investing in is vital. Tom Bishop, a Massachusetts investment adviser and editor of *BI Research*, one of the top-ranked investment newsletters for the past five

years, says, "Novice investors should know what a company does and why that's likely to help it do well in the future." Additionally, understanding the factors that drive stock prices up and down is essential to choosing good investments. 

Jeff Wallach has written about finance and investing for Diversions and Men's Fitness and is the author of Beyond the Fairway: Exploring Golf's Unmanicured Terrain, published by Bantam.

See "Investors' Forum Files," page 38.

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The Basics: Investors' Forum Files

The Investors' Forum libraries contain a wealth of information for novices. The following files explore everything from the definition of "return" and "yield" to a demo of a stock-valuation program.

The Investors' Forum's (GO INVFORUM) Library 15, "Novice Investors," offers a plethora of useful files for members new to the "trade." Also check out Library 9, "Demos and Info," for investment-related software.

Library 15, "Novice Investors"

Online Sources—How and where to find information online about companies you might invest in. COMPAN.THD (26,712 bytes).

Wordy Explanations—List of investment terms' definitions. INV_TE.ZIP (16,246 bytes).

Basic Understanding—Chapters 2 through 4 on Basics of Stocks from *Pragati*, a monthly stocks newsletter. LESSON.TXT (26,593 bytes).

Mutual Relations—The answer to the question "Can my mutual fund go belly-up?" FNDSFE.THD (4,960 bytes).

Shopping for Broker—Guide to choosing a discount broker, excerpted from the documentation for Commission Control, a discount-broker calculator and comparison program. CHOSDB.TXT (12,572 bytes).

Futures Endeavor—Advice for beginning futures traders, addressing the chances of success and ideas on how to decrease the odds against you. FUTNOV.THD (56,376 bytes).

Yield and Return—Learn the difference between "yield" and "return" and which is more important. YLDRET.THD (4,254 bytes).

Reading List—Get up to speed with suggested stock-market books for the '90s. BOOKS1.MKT (17,431 bytes).

PE Education—Explanation of a price/earning (p/e) ratio. PE.THD (6,602 bytes).

Bonding Time—A primer on the relationship between bond prices, yields to maturities, and interest rates. BONDS.THD (10,001 bytes).

Kid Stuff—Ideas and resources for teaching children the principles of investing. CHLDNR.MKT (9,055 bytes).

Gaining Leverage—Members discuss the pros and cons of leveraged investing/speculating. Outlines the available leverage alternatives, their upside potential and downside risks. LEVER.THD (7,008 bytes).

Personality Counts—Find out what skills are necessary to be a successful investor or trader. LRNSKL.THD (24,126 bytes).

Goal-ie Talk—How to set and monitor your investment objectives, including the use of personal journals or newsletters to keep your goals in sight. GOALS.THD (9,115 bytes).

At the Blackboard—Advice for a novice investor who is also a college student. STUDNT.THD (9,718 bytes).

Library 9, "Demos and Info"

Parse-O-Matic 2.40—The import-export expert that allows you to move data between programs that don't understand each other's data, and to convert reports from one program to a format useful to the other. Shareware. PAR.ZIP (126,870 bytes).

Captool 4.0g Portfolio Manager—Demo of a portfolio-management program that handles virtually all investment types and transactions. Includes ROI computation, graphics, price and dividend downloads, cost-basis computation, customizable reports, and stock and bond fundamental evaluations. CTDEMO.EXE (429,912 bytes).

Quant IX Portfolio Evaluator 5—Slide-show demo of investment software for both portfolio management and fundamental stock analysis. Tracks records for tax purposes; monitors buys, sells, income, gains, losses, and more; includes more than 30 fundamental ratios and six stock-valuation models. Q9PE.EXE (346,875 bytes).

FolioMan Demo—Demo of program that gives a capital-gains and a total-return calculation for income investments. Tracks stocks, bonds, mutual funds, options, bills, CDs, and futures. Includes fully automated downloading and updating from CompuServe's Basic Quotes. FMDemo.ZIP (678,595 bytes).

Wiley Investment Books—Brief descriptions of investment books available in the Wiley ProShop Bookstore (GO WILEY) in The Electronic Mall. WILEY2.TXT (9,451 bytes).

Stocks-at-a-Glance Demo—Demo of a stock-valuation program designed to operate with Windows or OS/2. Requires a user to enter only the stock's price, p/e, and dividend, information readily available in most newspapers. SAAG.EXE (207,309 bytes).



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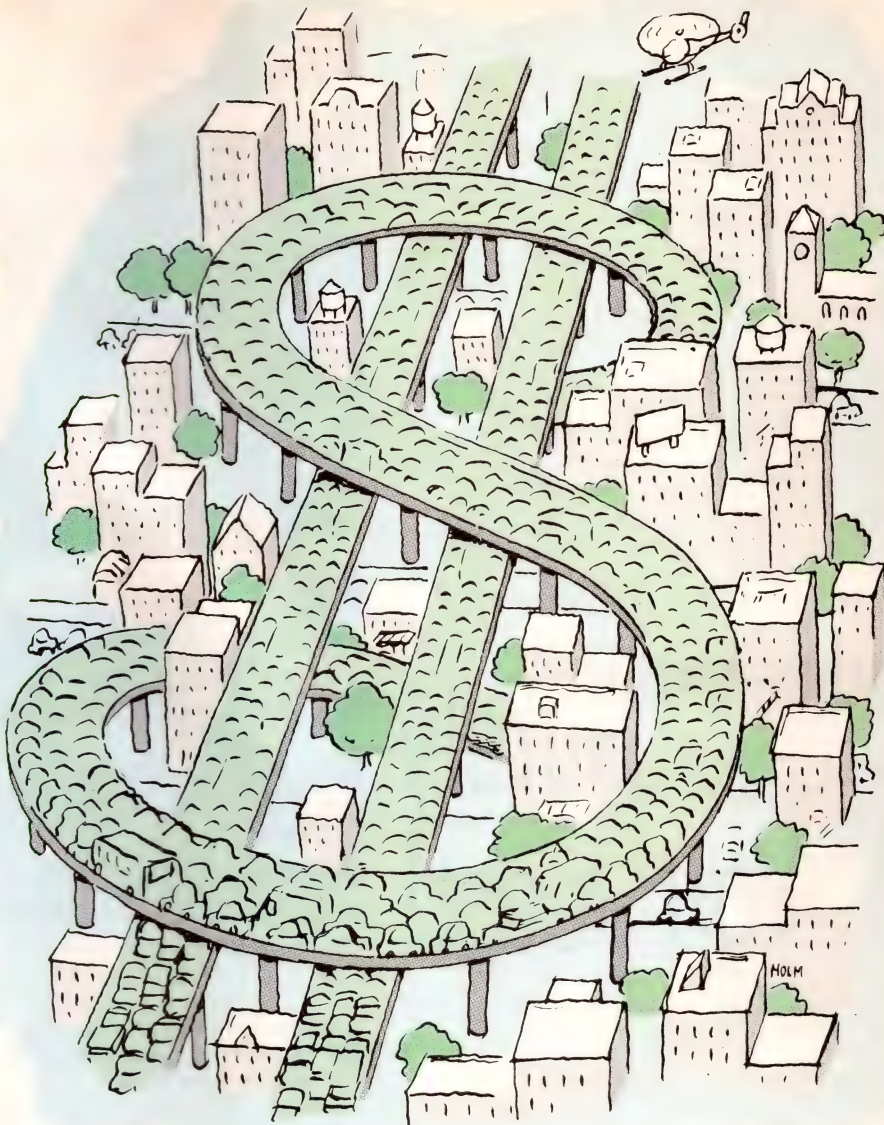
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▼
A Costumed
Cast From the Past

▼
Archive Photos, p. 42

▼
Forums' Log-on
Luminaries, p. 44

What medieval lurks in the hearts of men (and women)? Only living-history fans know.

It was a time when heroes proved their mettle in mortal combat and practiced the gentler art of chivalry. When the air might just as easily ring with the clang of sword against shield as with the delicate strains of a minstrel's lute. When knights swore fealty to the Crown and allegiance to one another over cups of mead.

A time long ago, perhaps, but not so far away for the thousands of living-history buffs who strive to re-create it with elaborate Renaissance festivals and medieval fests featuring everything from Cecil B. DeMille-scale wars and jousting tournaments, to the pageantry of royal coronations, to the bustle of an Elizabethan marketplace.

The events are sponsored by a variety of nonprofit groups, perhaps the most well known of which is the Society for Creative Anachronism Inc., or SCA. From its beginnings in 1966 as an informal medieval-theme party in California, the SCA grew into a worldwide network that celebrates what members consider the *real* "good old days" of pre-17th-century culture.

Many enthusiasts also meet online in the Living History Forum (GO LIVING), both in Section 3, "Medieval/Renaissance," and Section 15, "SCA [Medieval/Renaiss.]," where the SCA unofficially holds court. They

share information, plan events, reminisce, and even engage in "online combat"—actually, conferences using the "dice roll" command to produce random scores that translate into hits and misses. It's similar to such role-playing games as *Dungeons & Dragons*.

Offline, says Matt Drury (aka Lord Brian o Seanachain), who serves as co-sysop of the forum with his wife, Leann, SCA members adopt identities of real or fictitious characters from history and wear costumes that are appropriately "period." They divide their "Known World" into 13 "kingdoms," as well as smaller units, including baronies, shires, colleges, and strongholds. SCA membership is a hierarchy of queens, kings, knights, squires, and other honorifics earned in combat, and commoners such as peasants, beggars, and merchants.

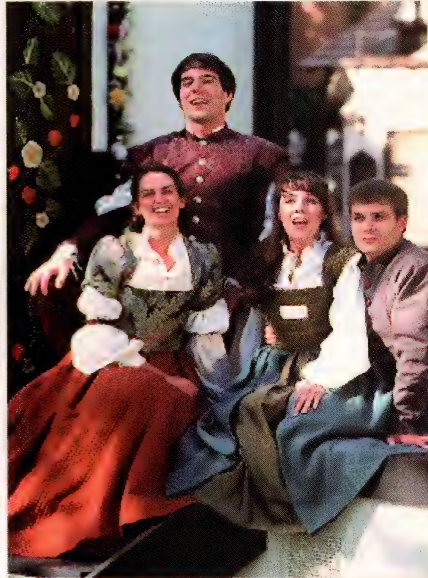
What makes the SCA appealing is that "it seeks to bring back many of the ideals people feel are lost today—chivalry, courtesy, and so forth," Drury says. And "it has become very much an extended family," now with more than 25,000 members worldwide.

In Drachenwald, the society's European "kingdom," members enjoy a special advantage, says Wayne Remes of Giessen, Germany: "We get to hold tournaments and

*Martha Barnette, a writer in Louisville, Kentucky, indulges her own passion for history by writing books about word origins, including *A Garden of Words* (Times Books/Random House). Her CompuServe User ID number is 75300,3140.*



Sir Axel of Tavastia and Viscountess Mistress Jeanmaire Ilaria Beatrice du Domre'my at English castle; (right) actors from Utah Shakespearean Festival production of *The Greenshow*



COURTESY: THE UTAH SHAKESPEAREAN FESTIVAL

feasts in real castles." For Remes in particular, a computer-systems manager (aka Viscount Sir Axel of Tavastia), the SCA provided yet another benefit: he met his wife, Jeanmaire (Viscountess Mistress Jeanmaire Ilaria Beatrice du Domre'my), there. Their marriage spans several centuries, sort of: Remes's persona is "a Finnish warrior, circa 1070," and his wife's is that of "a 16th-century French merchant-class lady."

The two often travel to SCA events, including the largest, the Pennsic War, held each August just north of Pittsburgh, Pennsylvania, where more than 8,000 participants wear replica armor and fight using weapons made from rattan fashioned to look and handle like the real thing. "The battles have thousands of fighters on each side, and involve movement and control of large groups of combatants," Remes says.

Although wars are usually the main attraction, members also engage in more peaceful pursuits, reveling in feasts at long tables (with or without utensils, depending on one's time period) and enjoying serenades by strolling minstrels and entertainment by troupes of "players." They also practice arts and crafts of their time, including calligraphy, armor-making, and heraldry, and find ingenious ways to heighten the overall sense of realism, says SCA member Pat Taylor: "I've seen tallow lamps made out of cat-food cans, and plastic coolers covered in contact paper to make them look like wood boxes."

Taylor, whose trippingly-on-the-tongue festival name is Lady Dianna Wyndalan of

Kidwelly, discovered the SCA 19 years ago while in the navy and dreading a dull weekend. "A friend said, 'Hey, I met this neat bunch of people who play knights in shining armor.'" They threw together makeshift tunics and hurried off to a festival at Duke University, where they dined on roast pig in a great timbered hall, saw a Shakespearean play, and "met about 150 new friends," the Orlando, Florida, writer recalls. "I've been at it ever since."

Laurie Hupman's theatrical talent drew her into the SCA, when she accompanied a friend to a festival and soon found herself cast in a play. Hupman, whose *nom de fête* is Rose de LeMans, now spends spare time researching medieval plays, the role of women in theater before 1600, and costuming—that is, when she's not working as a corrections officer in Santa Cruz, California.

Not all those who celebrate the Middle Ages and Renaissance belong to the SCA, however. Roger H. Gray of South Pasadena, California, got hooked on history as a teenager when he visited a Renaissance Pleasure Faire sponsored by the Living History Center of Devore, California. He'd been appearing in a high-school production of Shakespeare's *The Tempest*, and when he learned he could be admitted into the fair for free if he showed up in costume and recited a sonnet, he figured, Why not? "I did it, but felt the fool in tights and all the rest. Still, the bug bit." Now a civil-trial attorney and an adjunct professor at the University of LaVerne College of Law, he portrays Elizabethan tav-

GIFs Fit for a King: Forum Image Files

Whether you're a Renaissance man or woman curious about 16th-century costume, or a Civil War buff interested in battlefield photography, or you just want to reminisce by gazing at some nostalgic photos from the 1950s, you'll find a veritable feast for the eyes among the many historical photos stored in online libraries.

The libraries of the Living History Forum (GO LIVING) contain scanned GIF images of arts, crafts, heraldry, and documents of historical interest, says sysop Matt Drury. Forum members have also supplied several snapshots from recent get-togethers, all the better to give the uninitiated a taste of what it's like to attend a Civil War re-enactment or a Renaissance festival. Here are some of the most popular files, according to Drury:

Cornwall's Ancient Stones: The Men-an-Tol. Library 2, "Antiquity," ACS002.GIF (143,885 bytes).

The Crew of the Santa Maria. Library 3, "Medieval/Renaiss.," STMCRW.GIF (196,323 bytes).

Musketeers of Plimoth Plantation. Library 4, "Reform./Revolution," MSKTR1.GIF (145,261 bytes).

The Caning of Sumner on the Senate Floor. Library 5, "Civil War/Frontier," SUMNER.GIF (121,630 bytes).

Valhalla, the Ships' Figurehead Museum, Tresco. Library 6, "Victorian/Edwardian," SCY013.GIF (314,371 bytes).

P.S. Waverley at Portishead. Library 7, "Twentieth Century," WAV03.GIF (248,533 bytes).

HMS Plymouth: The Ward Room. Library 9, "Arms and Armour," HPLYM1.GIF (215,197 bytes).

Utah Shakespearean Festival—The Greenshow. Library 11, "Bardic/Shakespeare," SHF06.GIF (100,686 bytes).

Miners at East Pool Mine, Cornwall. Library 14, "Business/Industry," EPAL01.GIF (107,752 bytes).

The Arms of Barony Darkwater, Trimaris. Library 15, "SCA [Medieval/Renaiss.]," DRKARM.GIF (24,278 bytes).

Renaissance Festival in Arizona. Library 16, "CW/RenFaire/F&I/Etc.," AZ072.GIF (201,315 bytes).

Archive Photos Forum Offers More History

The Living History Forum isn't the only place you can get online glimpses of history in GIF format. The libraries in the Archive Photos Forum (GO ARCHIVE) include more than 850 stock images, many with historical significance. These images, supplied from the U.S. National Archives in Washington, D.C., include engravings, drawings, and photographs from

earliest times to the present, and span a variety of interests, from world history and current events to sports, arts, and Hollywood. Forum members are always welcome to request specific images to be added to the online collection. Here's a sampling of current listings:



Last Tudor monarch: Queen Elizabeth I

Queen Elizabeth I.

Library 4, "Today in History," C15130.GIF (89,256 bytes).

Admiral Horatio Nelson.

Library 4, C15138.GIF (85,249 bytes).

Peter the Great.

Library 5, "Famous People," C10346.GIF (80,910 bytes).

Galileo.

Library 5, C10605.GIF (90,916 bytes).

Isaac Newton.

Library 5, C10617.GIF (100,278 bytes).

Marie Antoinette.

Library 5, C10626.GIF (89,340 bytes).

The Love of Paris and Helen.

Library 5, C10681.GIF (200,860 bytes).

Leonardo da Vinci.

Library 5, C10734.GIF (103,795 bytes).

Hannibal on the Way to Rome.

Library 17, "Historic Milestones," C10729.GIF (121,002 bytes).

Printing of the Gutenberg Bible.

Library 17, C10732.GIF (165,972 bytes).



English naval hero: Admiral Nelson

ern owner Roger Hawkwood at the Renaissance Pleasure Faire, and regularly instructs Faire actors and sponsors in an "Applied Elizabethan" workshop, demonstrating the difference between current English and that spoken 400 years ago.

Not all of the Living History Forum focuses on the Middle Ages and Renaissance. Its sections range from Antiquity (Section 2) to the Twentieth Century (Section 7). (Civil War buffs in particular, in Section 5, tend toward historical "re-enactments" rather than "re-creations," Drury says, the difference being that "re-enactors" simulate specific events from the past, painstakingly striving for accuracy.)

Forum member Mark Gist, a computer-programming supervisor for the City of Columbus, Ohio, indulges his passion for the past by working as curator of a full-scale reproduction of the *Santa Maria*, on which he portrays the vessel's musket-toting master of arms, Diego de Arrana. He also takes part in 17th-century re-enactments at the Plimoth Plantation in New England. Most satisfying, he says, is hearing everyone speaking with a period accent, using the honorifics "Goody" and "Goodman," answering questions with "yea" or "nay," and observing such differences in pronunciation as "mudder" for "mother."

Toronto research scientist Philip Coll-

man, who also makes pilgrimages to Plimoth, agrees it's a thrill to listen to a roomful of re-enactors sounding like the real thing. "You haven't lived until you have heard someone giving orders in a period-correct Somerset accent: 'Give voyre!' for 'Give fire!', or 'Arr' for 'yes.'"

Regardless of one's period of interest, staying in costume and in character on the way to and from such events leads to equally memorable moments:

Once, dressed in full regalia, Collman and some others stopped at a nearby bar. "The locals assumed that we were some weird religious sect," he recalls. "But few religious sects drink like fish and sing crude songs, so the locals were pacified in the end."

Marjorie Wilser, a graduate student in U.S. history at San Jose State University in California, is a forum staff member who participates out of a lifelong fascination with the more recent past, namely, the Victorian era. "While still in high school, I was making costumes for myself and wishing to live in a time where I'd have to own a horse, wear long dresses, and use dip pens and sealing wax." Now she volunteers at a local museum, demonstrating an 1873 treadle printing press or portraying Madame Sophie, a French dressmaker from Victorian times. "I love the clothes, the handcrafts, and the manners of

the 19th century. I feel at home there—it's my private fantasy."

Forum members say there's no electronic substitute for the magic of offline historical re-creations. Still, says Janet D'Agostino-Toney (known on the forum as Janet the Nameless), the wealth of information they share is indispensable. D'Agostino-Toney, a

Sacramento, California, maternity nurse, plays a 12th-century Russian peasant.

"I've received offers to help me locate information about Russian costumes and history from members online whom I would probably never have known any other way."

Taylor agrees that modern-day modeming lacks the color and pageantry of actual get-togethers. "There's no bardic fire, there's no timbered mead hallways, there are just words on a screen," says Taylor. "We can't see each other's garb, or dance." Still, she adds, "we can hang out in the hallways with our friends-we-haven't-met-in-person-yet and gab. There's just something really satisfying about kindred spirits getting together on a semi-regular basis."

Any new kindred spirits who drop by the Living History Forum are sure to find themselves hailed and well met. ☺

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The cruise departs from Los Angeles on Friday, October 14, returning to port on the 17th. Electronic Mall merchant, Rosenbluth Vacations, is now offering special rates for the CompuServe Anniversary Cruise, with cabins ranging from \$269 to \$349 per person, based on double occupancy. (Regular rates for this voyage would be \$499 to \$869!) Book early because cabins are going fast...and every member who books a ticket will also receive a \$25 usage credit. It's our way of saying, "Bon voyage!"



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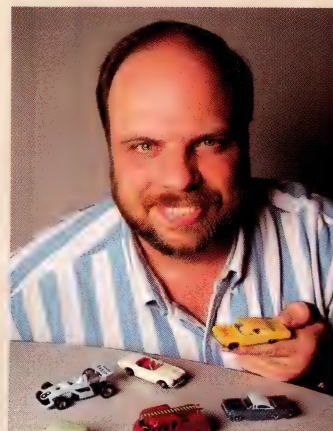


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DAVID SESSIONS



CHRISTOPHER HARTING



Members who offer a helping hand online are honored by sysops and peers (left to right): John Beal, California Forum; Clement Gollier, California Forum; Frank Herzog, Collectibles Forum; and Chris Parker, Aviation Forum.

Outstanding in Their Forums

► Sysops give 2.5 million seconds of cyber-fame to helpful sorts.

If you hang around your favorite forum long enough, you'll find forum members who always seem to contribute something extra, whether it be by uploading files, hosting conferences, answering questions, or generally helping their fellow members get the most out of a forum.

A number of CompuServe forums recognize these efforts by selecting a member of the month, an honor bestowed on a member whose participation contributes to the success and richness of the forum experience. Candidates are usually selected and voted on by the forum's sysops, and those chosen are awarded a free month in the forum, plus the recognition and esteem of their peers. But forum programs vary slightly, each mirroring the uniqueness of its members.

Linda Woeltjen, sysop of the California Forum (GO CALFORUM), says her forum chooses a Californian of the Month and Honorary Californian: "What we intended ever since we began planning the forum was to make sure our members knew how much we appreciated them." Forum sysops choose one resident and one nonresident per month because "it allows us to thank more people for participating and lets us get to know more of our members," says Woeltjen.

Many California Forum members provided valuable assistance in the aftermath of the January 17 earthquake. One of them, John Beal, a recent Californian of the Month, helped make contact with several people "missing" after the disaster and notified their

families. "It was one of the more rewarding activities of my life," he says. A musician whose Reeltime Music Inc. has a long list of popular television and movie music credits, he still finds time to remain active in the forum. "I contribute information about things to do and see in Southern California to out-of-state visitors," he says. Beal also contributes "polite and casual" debate about political issues and is gearing up for more discussion and information on this year's California elections.

Another reason for choosing an Honorary Californian is to show how the forum is not just for residents. One recent Honorary Californian, Clement Gollier, of Brussels, Belgium, visited California and became active in the forum as soon as he joined CompuServe. Although living nine time zones away doesn't help him relate to some forum issues, he's found some common ground. "I've debated taxes and the pros and cons of big versus small government, and described what it's like to live in Belgium," he says. Gollier, who runs his family's metal engineering business, says that thanks to the forum he knows where he'll spend his next holiday: "I've learned a lot about California. I loved the place before, but now I just can't wait to return there."

Most of the forums with member-of-the-month programs ask honorees to upload a short biography. In the California Forum, these bios are found in Library 10, "Californians," offering another way for members to learn more about one another.

The Collectibles Forum (GO COLLECT) recently decided to take a different approach to its long-standing member-of-the-month program. According to sysop Susan Wilson,

Section 13 focuses on one particular large collection each month, as chosen from hundreds discussed in Section 7, "Other Collectibles." Section 13, titled "Hot! <current collection>," features a guest host, much like the old-style member of the month, who is chosen for being the most active in that collection, and is awarded a free month to field questions from others interested in the topic.

In April, "Hot! Die-Cast Cars" debuted in the forum's revolving showcase of collections, with Frank Herzog of Westboro, Massachusetts, as guest host. A sports photographer and author of *Herzog's Guide to Matchbox Miniatures*, Herzog started collecting Matchbox toy cars as a kid. "Each week I took my 50-cent allowance to the hobby shop to buy a Matchbox, then pored over the pocket catalog at home to plan the next week's purchase. I guess I never grew up; I'm still buying them," he says.

Most of the questions Herzog has fielded during his stint as guest host have come from beginners. "Few members are involved in organized collecting clubs, so I can clear up a lot of confusion. Mainly I direct people to resources." Since he publishes a price guide, he is frequently asked about the value of certain cars. "I try to coddle the fascination that collectors have with these toys," he says.

In his two years of activity in the Col-

RANDOM ACCESS

The Graphics Forums Honor Their Best

Highlighting forum members' talents and contributions takes on a twist with the graphics forums' Hall of Fame libraries, where each forum's best images are showcased. All the graphics uploaded to participating forums are automatically entered in the monthly Hall of Fame contest, with each winner receiving one month of free access to the forum his image resides in. A team of forum staffers screen the images and select nominees; the images are then judged for technical and artistic excellence. Honorable mentions are awarded to close seconds.

Recent Hall of Fame honoree Lucia Chambers of Springfield, Virginia, was experimenting with Matisse Grey software she obtained free from the Graphics Support Forum (GO GRAPH SUPPORT) when she created the winning image *Still Life No. 1*. "I had been searching for software that acted like a canvas and a brush, something more artistic," says Chambers, who edits a magazine for surveyors and cartographers, runs a network of BBSs for writers and artists, and creates freelance artwork and portrait assignments in her spare time. "Matisse felt like a paintbrush, so I told BBS members about it and they started downloading it, too."

Her winning Matisse Grey image depicts a shelf holding a wine bottle, a glass, and grapes. The image is available in the Computer Art Forum's (GO COMART) Library 3, "Hall of Fame," SLIFE1.GIF (54,090 bytes). Since creating the image using a '486DX/266 computer, she has used the software to touch up photos for the magazine she edits, to draw a portrait of her parrot Cosmo, and to develop an image from a favorite picture of fishermen on a bridge near Long Island, New York.

Joe Mack, a freelance multimedia developer in Indianapolis, Indiana, uploaded a 3-D-rendered scene of a wooded pond that won a Graphics Plus Hall of Fame Honorable Mention. An orb hovering above the pond suggests "other life that may be out there," says Mack. "It's a vision I got from several science-fiction movies. I couldn't put it on paper, so using the computer, I tweaked the image's details until I approximated that vision." He created the pond, the base element for the scene, using PhotoShop on his Quadra 800 Macintosh computer. He then imported the element into StrataStudio Pro and used the software to add 3-D depth and create trees, fog, and a light source. The whole process took him about two days. The image, *Jungle Dreams*, is in the Graphics Plus Forum (GO GRAPH PLUS), Library 3, "Hall of Fame," JGDREA.JPG (36,408 bytes).

Because the Hall of Fame libraries have existed since early 1989 and contain all of the images contributed since then, they help illustrate the progress of the best home-computer graphics, says graphics forums sysop Matt Drury. "Many of the oldest winners hold up very well against the newest work. The biggest change has been the number of CompuServe members who can view the images in their full glory," he says.

Hall of Fame libraries are available in the following graphics forums: Graphics Corner (GO CORNER), Computer Art, Graphics Developers (GO GRAPHDEV), Quick Pictures (GO QPICS), and Graphics Plus.

—Tracy Mygrant

lectibles Forum, Herzog not only has stirred up interest in the hobby but also has met trading partners from around the world. On a trip to Japan, he combined his passions for Matchbox cars and baseball by meeting a forum member from Tokyo who worked at the city's only baseball-card shop. He was then treated to a trip to the Tokyo Dome baseball stadium and Toys R' Us. "It was the highlight of my trip," he says.

Wilson says that if a specific collection showcased in Section 13 generates enough interest, it becomes a prime candidate to receive its own permanent section in the forum. Herzog probably wouldn't mind having a section for die-cast collectors. "I'm anxious to see an active die-cast community on CompuServe. It would be a great asset to the hobby," he says.

The Aviation Forum's (GO AVSIG) TopGun award, later renamed the John B. Galipault Memorial TopGun Award after the forum's late founder, originated in January 1990. The honored pilots and flying enthusiasts receive one free month in the forum, have their autobiography listed in Library 0, "General/HELP," and are announced in the forum News Flash. Sysop John Haverland says, "JBG [as Galipault was known] inspired us to achieve excellence in our flying and our lives and promoted safety through communication. We hope this award will preserve his ideals and his memory."

Recent TopGun Chris Parker, a Bristol, England, native now living and working in Hong Kong as a pilot for Cathay Pacific Airways, says he joins forum discussions if

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he has something useful to add. After an airline mishap, AVSIG members usually start discussing safety and procedures. "When a Boeing 747 went swimming in Hong Kong harbor earlier this year, forum member Dave West and I gave details on the incident and explained the problems we experience landing wide-body aircraft in Hong Kong in adverse weather," he says.

In 1993 he took his family on a flying holiday in the western United States,

planned with the help of local forum members. He posted "in-the-air" reports of the trip and, upon arriving home, edited the trip reports and advice he'd been given into the file WESVAC.TXT in Library 12, "Places to Fly." "I still get questions about it from others planning similar trips," he says. Like many member-of-the-month winners, Parker used his free month online to catch up on the message board and "down-

load lots of files."

As an experienced military fast-jet pilot, airline pilot, and light-aircraft pilot and instructor, Parker knows how important one of the forum's ideals, safety, is. His advice? "Don't trust anybody. Keep practicing the hard stuff. Don't cut corners—you'll know them when you see them."

Literary Forum (GO LITFORUM) sysop Alex Krislov has no set guidelines for choosing his forum's Writer of the Month. "Some have been best-sellers; others are experts in genres rarely discussed in forum conversations. Ideally, the writers who participate are both experienced and newly professional," he says. As in other forums, the Writer of the Month receives a free month on the forum. Krislov sees this as a way for them to give back a little of their hard-won experience to other professionals and those who haven't yet been published.

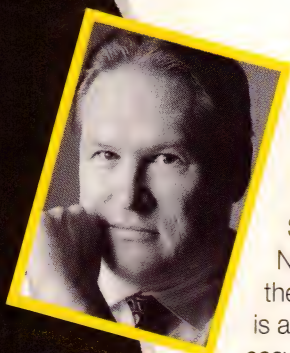
Author Julia Kendall, whose 10th book, *No Brighter Dream*, will be published in October, had been active in the forum since February 1993 before becoming Writer of the Month. She began writing full-time in 1984 and sold her first book, *Wild Rose*, in 1986. During her WOTM stint, Kendall says fellow writers frequently asked for her advice on breaking into publishing. "Everyone's success story is as different as one's writing style," she advised. "It's important to follow your internal voice and to take the established rules as guidelines but not as gospel."

To Kendall, the forum's camaraderie is one of the biggest rewards she's received. Support is another benefit. "The forum is a combination writers' support group, university library, ongoing cocktail party, and general good time." ☎

Michele D. Kinnamon is an assistant editor of CompuServe Magazine. Her User ID number is 75300,444.

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Participating Forums

Forums that maintain member-of-the-month programs include: Aviation Forum (GO AVSIG), John B. Galipault Memorial TopGun Award; California Forum (GO CALFORUM), Californian of the Month; Collectibles Forum (GO COLLECT), Hot! Collectible of the Month; Cook's Online Forum (GO COOKS), Cook of the Month; Crafts Forum (GO CRAFTS), Member of the Month; Diabetes Forum (GO DIABETES), Member of the Month; Gamers' Forum (GO GAMERS), Multi-Player Games Forum (GO MPGAMES), and Role-Playing Games Forum (GO RPGAMES), SuperGamer; Literary Forum (GO LITFORUM), Writer of the Month; and the National Association of Investors Corporation Forum (GO NAIC), Member of the Month.

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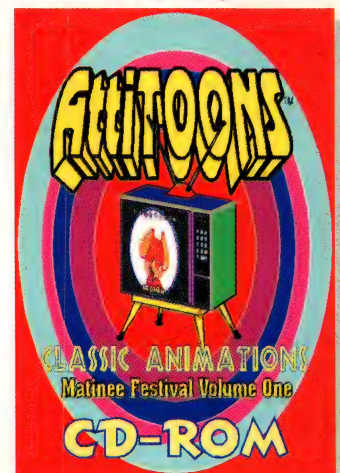


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Downloadable Notables

Downloadable Notables is a monthly catalog of new and interesting uploads compiled by associate editor Christopher Galvin. You can suggest a file for mention by sending the full forum file description (including forum name, library, file name, size, title, and summary) and a note explaining why it caught your fancy to CompuServe User ID 71154,74. *Do not send the file itself or questions regarding listed files.* Many mentioned program files are shareware; view the full file description online for details, and please support the shareware concept. If you cannot locate a file, check the forum's News Flash for late changes or post a message within the forum to *SYSOP asking for assistance.

From the Notables E-mailbag

—Letters, we get letters . . . Diving right in, R. Steve Walker recommends Personal Best 1.1, a DOS/Windows PIM program with diary, to-do list, contact list, screen blanker, birthday and appointment reminders, and a daily food-for-thought quote, joke, or insightful wisdom. "It's the mental breakfast of champions; it gets your creativity flowing," Walker says. Windows Users Group Network Forum (GO WUGNET), Library 1, "Fun and Games," BEST.ZIP (141,530 bytes).

Todd Garber suggests NoteWare, the "ultimate DOS and Windows TSR notepad," with feature-packed editor, screen capture, exporting, calendars, and more. "I find it invaluable and use it daily," says Garber. IBM Systems Forum (GO IBMSYS), Library 7, "Desktop Utils," NOTEWR.ZIP (114,321 bytes).

Nick Gammon wishes to point out GIF Slideshow, his rapid-decoding drag-and-drop viewer for GIF, TIFF, MacPaint, and PICT images. It includes random/sequential viewing and manual/automatic image advancing. "It's particularly useful for viewing CD-ROMs full of pictures, as it can save all the file names of all GIFs found to a special file on your hard disk," he says. Macintosh Applications Forum (GO MACAP), Library 9, "Graphics Tools," GIFSSH.SEA (88,832 bytes).

Photo CD Magazine editor Terry Ulick directs the attention of Photo CD users to a short text file detailing how CompuServe members can get a free subscription to his publication. Journalism Forum (GO JFORUM), Library 12, "Future Media," PCDSUB.TXT (1,781 bytes).

The Basics—First-time members and even old hands should visit the CompuServe Help Forum (GO HELPFORUM) for, of course, helpful files about online services and ways to save connect-time charges. Library 1, "Help Library," features Robin Garr's file of frequently asked questions about auto-navigation programs such as

TAPCIS and Navigator; an overview of different file-compression formats found online; a list of the more than 500 public forums and their message, library, and conference sections; and a list of regular conferences in various forums.

AUTOP.INF (31,104 bytes);
FORSEC.ARC (181,347 bytes);
CONSCH.TXT (16,981 bytes).

Library 2, "Reference Help," has general information about the Knowledge Index database service.

KL.TXT (37,776 bytes).

Dittohead Alert—Fans of the Rush Limbaugh talk-radio program can check into the Issues Forum (GO ISSUES) for John Switzer's daily rundown of happenings on the three-hour show. Switzer, not officially connected with the program, summa-

rizes the day's discussion topics and Limbaugh's syndicated morning update, and includes sound bites from Limbaugh and callers as well as "Lest We Forget" highlights from the program airing two years previously. Library 9, "Rush H. Limbaugh." Search by the keyword SUMMARY (files are text or ZIPped text with name format 080194 [date stamp] .TXT or .ZIP).

Stacks and Stacks—HyperCard fans can browse the Macintosh Scripting/HyperCard Forum's (GO MACHYPER) great variety of informative and fun stacks. Library 2, "Games," features Blackjack Deluxe, a complete use-configurable casino package with counting tutorial and best-play tables, and the Golden Key, an adventure game with animation and sound.

This Month's FILE CLUSTER

Once again, you've caught the data-library tour bus we like to call the File Cluster, a search of CompuServe's many forums for files all using the same keyword. This month: The immortal Bard thought it was the Thing to do in Pee-wee's "house"; work "the field" of mates this way, you'll soon be called a louse: PLAY.

Safe at the Plate—Baseball great Jackie Robinson, second baseman for the Brooklyn Dodgers, slides into home in this 1947 action photo. Archive Photos Forum (GO ARCHIVE), Library 10, "Sports/Fitness," C10361.GIF (111,718 bytes).

Floor Time—A description of this method, suggested by a therapist, by which parents bond with children. Attention Deficit Disorder Forum (GO ADD), Library 2, "Parenting Issues," FLOOR.TXT (6,382 bytes).

Online Chess—Play chess via modem with this DOS program. Mouse support, save game, and dialing directory included. Chess Forum (GO CHESSFORUM), Library 5, "Hardware/Software," OCHESS.ZIP (54,240 bytes).

Football Fan Mail—Want to write to an NFL football player? This file contains a list of addresses for all teams. Collectibles Forum (GO COLLECT), Library 11, "Autographs," FOOTBA.TXT (2,792 bytes).

Kids Stuff—For children's crafts, here are "recipes" for poster paint, papier-mâché paste, basic bread craft dough, and finger paints. Cooks Online Forum (GO COOKS), Library 9, "Breads," CHILDR.TXT (1,546 bytes).

Deaf Lit—A list of books and plays in which hearing-impaired characters are featured. Disabilities Forum (GO DISABILITIES), Library 3, "Deaf/Hard of Hear.," LIT.BIB (20,809 bytes).



Big Keyboard Bang—Let your toddler pound away: this Windows program just displays your BMP files while playing associated WAV sound files. Education Forum (GO EDFORUM), Library 2, "Software to Go," KIDSDE.ZIP (29,377 bytes).

Recorded History—A GIF from the Smithsonian Institution of the first model 45-rpm record player made by RCA in the 1950s, on display in an "Information Age" exhibit. Graphics Gallery Forum (GO GALLERY), Library 5, "Sci-Tech/History," 45RPM.GIF (138,374 bytes).

Living Happier and Longer—That's the topic of this inspirational DOS text file with 100 longevity tips focusing on nutrition, attitude, and more. Holistic Health Forum (GO HOLISTIC), Library 10, "Healing and the Mind," LIVE6.EXE (18,507 bytes).

Windows Word Search—A multimedia-ready word-hunting puzzle game you can play onscreen or print off. Optional timer, hint mode, and sound included. IBM New Users Forum (GO IBMNEW), Library 8, "Word & Card Games," WWS101.ZIP (509,361 bytes).

Macro-Making—Record keyboard tasks for playback with delays or at high speed with this powerful script language. Runs by hot key or scheduling, with unlimited recording length, users guide, and many more features. IBM Systems Forum (GO IBMSYS), Library 3, "General Utils.," PTM229.ZIP (252,780 bytes).

JERRY VELASCO

BLACKJ.SEA (235,520 bytes);
GKEY.SEA (1,360,128 bytes).

Library 3, "Education," includes PhlashCardz, a demo version of a simple but elegant construction utility making memorization easy, and a Voyager Expanded Book edition of *The Wizard of Oz*, with large-type option.

PHLASH.SIT (53,248 bytes);
WIZARD.SEA (595,840 bytes).

Library 6, "Reference Stacks," has the Mac Stack, a wealth of information and tips for beginning and intermediate Mac users, and DadaPoet, which creates Dada-style poetry from whatever text has been copied into your Clipboard.

THEMAC.SIT (70,400 bytes);
DADA.SIT (11,392 bytes).

Parenting Problem—What to do when you're not sure the parents of your child's playmate are entirely trustworthy? This archived message thread explores options. Issues Forum (GO ISSUES), Library 6, "Parent Connection," PLYMAT.THD (33,681 bytes).

Be So Dramatic?—How do you write exposition that doesn't sound like exposition? Enliven a dull scene? These and other playwrighting problems are discussed in this excerpt from a book on dramatic technique by an award-winning writer. Literary Forum (GO LITFORUM), Library 9, "Screen and Stage," TOOLKT.JS (9,796 bytes).

Henry V—Acts I and II of Shakespeare's epic play about the English king's victory over the French at Agincourt. Living History Forum (GO LIVING), Library 11, "Bardic/Shakespeare," HENV-1.PLY and HENV-2.PLY (23,048 bytes; 30,187 bytes).

Tune Builder—Composer is a Macintosh HyperCard stack allowing you to enter notes of different duration via a piano keyboard. Play back the complete song in a variety of instruments. Macintosh Scripting/HyperCard Forum (GO MACHYPER), Library 4, "Music and Sound," COMPOS.SIT (33,664 bytes).

VIDVUE—A comprehensive Windows multimedia utility, playing GIF, JPEG, and other image formats, AVI and FLI/FLC animations, and WAV and MIDI sound files. MIDI/Music Forum (GO MIDIFORUM), Library 15, "Sound Card Files," CINEMA.ZIP (478,533 bytes).

The Blight of Stage Fright—How can artists overcome performance anxiety? This archived thread offers personal horror stories and helpful advice. Music/Arts Forum (GO MUSICARTS), Library 12, "Learning/Playing," PERF.ZIP (17,698 bytes).

Library 14, "Personal Databases," features TimeBook, a client/billing maintenance stack letting you punch "in" and "out" of jobs, and a cassette-box label printer for your taped-music creations.

TIMEBK.SIT (95,360 bytes);
CASSET.SEA (28,416 bytes).

OS/2-Ware—Users of IBM's multitasking operating system should visit the OS/2 B Vendor Forum's (GO OS2BVEN) Library 1, "OS/2 Shareware," for the latest productivity gadgets and games. Popular uploads include AlarmPro, an all-purpose PIM run from a desktop clock; a collection of seven solitaire card games; PM Patrol, a system-resource monitor tracking free/idle memory, disk space, CPU load, and more; and RPF Zip Control, which shields users from the command line when using the freeware OS/2 programs Zip and UnZip,

Fly Ideas—This final article in a three-part introduction to fly-fishing and casting looks at how to hook and play a fish. Outdoors Forum (GO OUTDOORS), Library 5, "Fishing," FLY03.RGS (8,990 bytes).

Long, Long Mac Sounds—SoundDisk lets you record audio directly to your Mac's disk, so sound files can be of any length. Sight and Sound Forum (GO SSFORUM), Library 7, "Macintosh Files," SNDISK.SIT (63,488 bytes).

Softball Manager—A DOS database utility for keeping track of statistics for players and league standings in school and city leagues. Sports Forum (GO FANS), Library 5, "Other Sports," SBMAN.ZIP (32,894 bytes).

First and Ten, Every Time—For users of Front Page Sports Football Pro, a handful of plays designed to make a mediocre team successful. The designer won his fantasy league championship undefeated. Sports Simulations Forum (GO SPRTSIM), Library 3, "Football," FBPLY.S.ZIP (26,863 bytes).

Who Wrote the Bard?—Did Shakespeare really write his famed plays? This paper discusses theories and why credit "should be given to the man from Stratford." Students Forum (GO STUFO), Library 9, "English/Literature," SHKSPR.TXT (11,502 bytes).

Audio CD Player—A highly popular player and track-cataloging program for Windows and CD-ROM-equipped PCs. Has features common to real CD players: shuffle play, track skip, music search, track/disc time display, fit to tape, more. Windows Fun Forum (GO WINFUN), Library 6, "Sound Utils," CDPJ.ZIP (316,045 bytes).

Win Organ—Simulator of an organ keyboard, with volume control and 125 instrumental sounds. Requires MIDI. Windows Users Group Network Forum (GO WUGNET), Library 9, "Multimedia," WORGAN.ZIP (51,900 bytes).

providing a point-and-click interface to ZIP file contents.

ALRMPR.ZIP (376,335 bytes);
FMCRRS.ZIP (176,167 bytes);
PMP213.ZIP (236,082 bytes);
ZIPCTL.ZIP (316,850 bytes).

Playing With Power—The new Video Games Forum (GO VIDGAMES) lets you exchange and download hot tips and info on all types of video games, entertainment consoles, and coin-operated arcade games. Library 2, "Sega," has two files explaining strategies and cheats for Sonic the Hedgehog and Sonic 3.

SONICC.TXT (3,487 bytes);
SONIC3.HNT (10,590 bytes).

Library 3, "Nintendo," includes a hint file giving locations of ID cards in Jurassic Park and the SNES Random Code Generator for the Game Genie, a QBASIC program that will work on any game of 16MB or less without an FX chip.

JPCARD.TXT (1,904 bytes);
SNESGG.BAS (4,466 bytes).

Library 4, "3DO Multiplayer," features a review of 10 popular 3DO games and a hint file for such games as Night Trap, Mad Dog McCree, and Escape From Monster Manor. 3DOREV.TXT (11,419 bytes);
3DO.HNT (14,383 bytes).

Library 11, "Coin-Ops," has "the mother of all Mortal Kombat 2 move lists," detailing hidden characters and friendships, and a frequently-asked-questions file from the Internet covering moves, hints, and cheats for NBA Jam and NBA Jam Tournament Edition.

MK2CMP.TXT (32,339 bytes);
NBAFAQ.TXT (25,841 bytes).

Windows Browsing—The Zenith Forum's (GO ZENITH) Library 15, "Windows," offers a fun selection of games and productivity programs. New uploads include: Heart Smart for Windows, which helps you plan healthy meals, even from fast-food restaurants; Lunar Phase Clock, presenting the current moon "time" in iconic form on your desktop; Cows, a screen saver that hurls bovines and the occasional poultry, complete with sounds; IcoFrite, a desktop gag in which all icons run away from the mouse pointer; MortgageCalc, a loan calculator handling amortization schedules and payments; and a TrueType font with dinosaur images replacing uppercase and lowercase letters.

HSMART.ZIP (79,324 bytes);
MOON.ZIP (14,711 bytes);
ICOFRI.ZIP (14,491 bytes);
MORTCA.ZIP (130,753 bytes);
TTDINO.ZIP (58,929 bytes).

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Online Book Reviews

Following are summaries of book reviews available for reading this month in *Online Today*. To read the complete reviews, use the GO commands listed at the end of each summary.

CompuServe Information Manager for Windows: The Complete Handbook and Membership Kit

By Steve Davis

Prima Publishing, 1994

411 pages, \$29.94 (softcover with two 3.5-inch diskettes)

This book offers a twofold education: the author teaches CIM for Windows and presents a CompuServe tutorial. Reviewer Sharon Kahn says this book-disk combination is an excellent value that pays for itself. **GO OLT-5010**

NetGuide: Your Map to the Services, Information and Entertainment on the Electronic Highway

By Peter Rutten, Albert F. Bayers III, and Kelly Maloni

Random House, 1994

356 pages, \$19 (softcover)

Billed as "the TV Guide of cyberspace," this book is a guide to the entire universe of online providers from CompuServe to the WELL, with a special emphasis on the Internet. Reviewer Paul A. Gilster says the book demonstrates how computer networks are learning to talk to each other. **GO OLT-5030**

Insanely Great: The Life and Times of the Macintosh, the Computer That Changed Everything

By Steve Levy

Viking, 1994

292 pages, \$20.95 (hardcover)

The Macintosh designers set out to create a computer that was not just good or great but insanely great. This book tells the inside story of the Mac's birth, and although it doesn't have the intimacy and drama of some works of its kind, it's still a good read, says reviewer John Edwards. **GO OLT-5040**

PC First Aid Kit

By Marty Jerome and Wendy Taylor
Addison-Wesley, 1994

361 pages, \$24.95 (softcover)

If you're trying to fix your sick computer yourself, this troubleshooting primer will help with the diagnosis and repair. With information on hardware and software problems and a disk of utility programs, this nontechnical book offers sound troubleshooting suggestions for the first-timer, says reviewer Harry Green. **GO OLT-5070**

The CD-ROM Book

By Jeffrey Sloman and Steve Bosak
Que Corp., 1993

402 pages, \$34.95 (softcover with one CD-ROM disc)

This reference text is a complete resource to compact discs and computers, containing just about everything you need to know about buying, installing, and using CD-ROM drives, says reviewer James Moran. **GO OLT-5050**

A DOS User's Guide to the Internet

By James Gardner

Prentice Hall, 1994

308 pages, \$34.95 (softcover with one 3.5-inch diskette)

Bundled with UUCP software, this book teaches DOS users how to access the Internet and take advantage of its many features. Reviewer Brian D. Monahan says it is ideal for those who need full, but inexpensive, Internet access. **GO OLT-5020**

Electronic Job Search Revolution Electronic Résumé Revolution

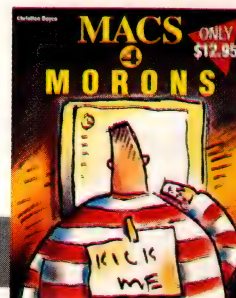
Both by Joyce Lain Kennedy and Thomas J. Morrow

John Wiley & Sons, 1994

207 pages, \$12.95 (softcover)

233 pages, \$12.95 (softcover)

Computers and simple software have revolutionized job hunting, helping to organize job seekers in a way never before possible. These companion books won't perform miracles, but they will provide an excellent foundation for leading a more effective job search, says reviewer William J. Lynott. **GO OLT-5060**



Macs 4 Morons

By Christian Boyce

Hayden Books, 1993

238 pages, \$12.95 (softcover)

Offended by the implication that the readers of this book are all morons, reviewer John Edwards says it glosses over complicated subjects, confusing brevity with simplicity. **GO OLT-5080**

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AUGUST 1994

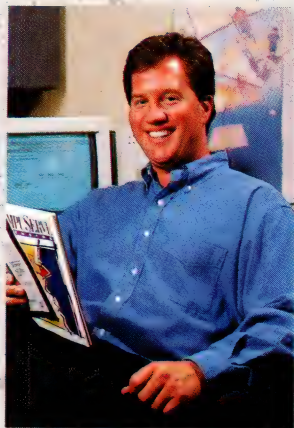


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There's still time to get in on the terrific computer shopping opportunities during The Mall's Computer Expo '94, too. You'll find innovative new technology and super savings, plus prizes, **free** gifts and a whole lot more. See page 5 for details.

This month we welcome two new merchants — Christian Children's Fund (GO CCF) and CAMPMOR (GO CAMP). As always, you can shop these new stores — and any Mall store — connect-free, 24 hours a day.

See you online!

Keith Arnold

Keith Arnold
Electronic Mall Manager



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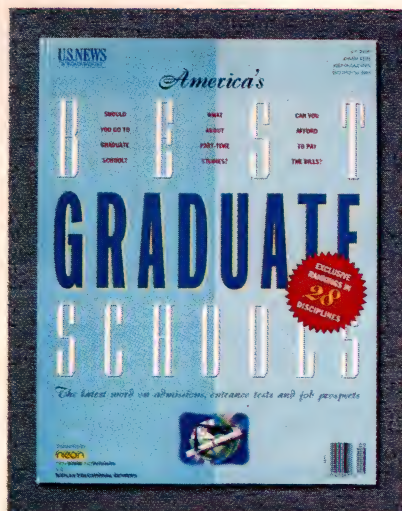
Style #29094.

**LANDS' END. GO LANDS
BOOK PACK
ORGANIZER \$32**



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U.S. NEWS & WORLD REPORT. GO USM

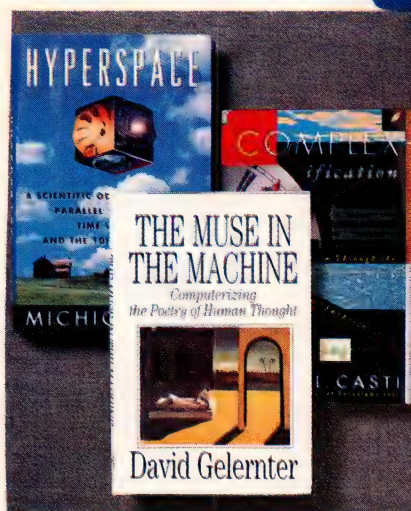


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MICROWAREHOUSE. GO MCW
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MACWAREHOUSE. GO MW
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NETWORK FAXING



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Handbook
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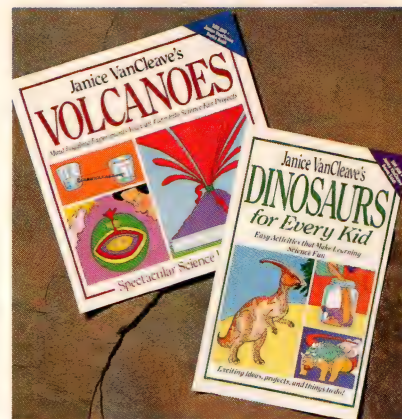
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SALE PRICE \$27.95

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LIST PRICE \$54.50

SALE PRICE \$43.60



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WILEY PRO-SHOP. GO JW

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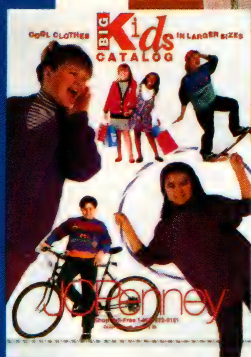
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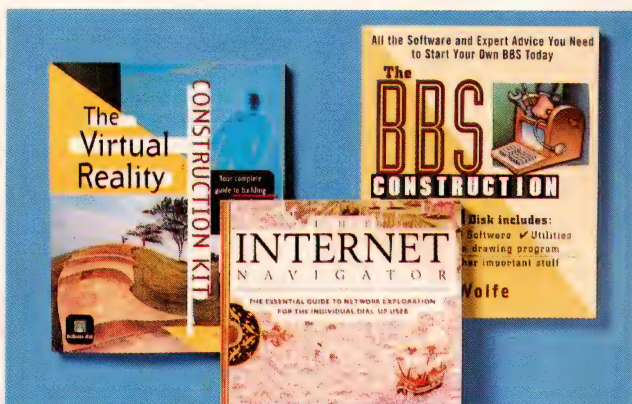
HEALTH & VITAMIN EXPRESS. GO RX

COMPUTER EXPO

Shop The Mall's Computer Expo '94!

The Mall's Online Computer Expo for 1994 is still going on. That means you've still got time to play online contests and games where you can win valuable prizes. Explore the guide to online services for computer hardware, software, supplies, services and more. Check out

the demo library of **free** downloads, the directory of **free** computer catalogs to order online — plus bonus offers and **free** gifts, connect-time credit offers and lots more! You'll find prizes, savings and fun! GO EXPO



Win a Book and \$50 Connect-Time Credit from John Wiley!

Complete our short, eight-question survey online and you'll automatically be entered in a drawing for three great prizes. The first-place winner will receive a \$50 connect-time credit and any book (up to \$50 value), the second-place winner will receive a \$25 connect-time credit and any book (up to \$50 value) and the third-place winner will receive a \$25 connect-time credit! No purchase required.

WILEY PRO-SHOP. GO JW



Download Epic MegaGames' Game of the Month — Free!

In *Jazz Jackrabbit* you control Jazz, a little rabbit who carries a big gun! This hilarious, cartoon-style animated shareware game will thrill and entertain you through six super-massive levels. The action is fast and fun, and the graphics, music and sound effects are superb. Download **free** during August!

EPIC MEGAGAMES. GO EP



Play MacWarehouse's Word Jumble Contest and Win a \$10 CompuServe Connect-Time Credit!

Solve the word jumble correctly and you could be one of 20 lucky winners of a \$10 CompuServe connect-time credit! Just rearrange the letters to spell familiar words. Selected letters from the rearranged words will spell out the answer.

MACWAREHOUSE. GO MW



Win a \$10 CompuServe Connect-Time Credit in MicroWarehouse's Hidden Word Contest!

Find the Hidden Words in a 10 x 10 square of letters. Once you find the words, the remaining letters will spell out the winning Hidden Word or phrase. Solve the puzzle, and you could win a \$10 CompuServe connect-time credit!

MICROWAREHOUSE. GO MCW

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APPAREL/DEPARTMENT STORES

AC	Americana Clothing
AU	Austad's •
BR	Brooks Brothers
JCP	JCPenney ■
LANDS	Lands' End
LEGGS	L'eggs Hanes Bali Playtex •
PG	Patagonia •
PFS	Paul Fredrick Shirt Company
SA	Shoppers Advantage Online •



ARTS/MUSIC/VIDEO

BBCM	BBC Magazine
CD	BMG Music Service •
BOT	Books on Tape •
BEM	Bose Express Music
CVA	Colonel Video & Audio
FREECD	Columbia House •
CCV	Critics' Choice Video •
▼ EWK	Entertainment Works
JR	Justice Records
LE	The Laser's Edge
MMA	The Metropolitan Museum of Art
NP	Narada Productions
COUNTR	New Country Music Magazine
ROCKVI	Rock Video Monthly

AUTO/BOAT/RV

AI	Automobile Information Center
AQ	AutoQuot-R
ATV	AutoVantage Online •
CDL	Cadillac Motor Car •
ESCORT	The Escort Store
FORD	Ford Electronic Showroom ■
FMC	Ford Motor Company ■
LM	Lincoln-Mercury Electronic Showroom ■
PON	Pontiac Showroom •

BOOKS/PERIODICALS

BOMC	Book-of-the-Month Clubs •
BOT	Books On Tape •
BH	Breton Harbor Baskets and Gifts
CCB	Children's Book-of-the-Month Club •
CBK	CompuBooks
ORDER	CompuServe Store ★
DB	Data Based Advisor
DFP	Detroit Free Press
ENT	Entrepreneur Group •
FCB	Fortune Book Club •
HAR	HarperCollins Online •
HCB	History Book Club •
JR	Justice Records
LOS	Library of Science Book Club •
MC	MacUser
MSP	Microsoft Press ■
MH	McGraw-Hill On-Line Bookstore
NN	NewsNet ■
ND	Nicholas Direct
PCC	PC/Computing
PM	PC Magazine
PCB	PC Publications
PRC	PRC Database Publishing
▼ PTR	Prentice Hall PTR •
PPP	Peachpit Press
QPB	Quality Paperback Book Club •
BK	Small Computer Book Club •
▼ TWEPB	Time Warner Elect. Pub. Bookstore
USM	U.S. News & World Report
JW	Wiley Pro-Shop •
WS	Windows Sources
ZD	Ziff Davis Publications

SA	Shoppers Advantage Online •
BK	Small Computer Book Club •
SP	Softdisk Publishing
▼ TA	Travelers Advantage •

COMPUTER HARDWARE/ SUPPLIES

DP	AT&T Online Store ■
CBK	CompuBooks
CE	Computer Express
CS	Computer Shopper
CA	Concord Direct
DA	Dalco Computer Electronics
DD	Digital's PC Store •
PWM	Exec/Direct
HTH	The Heath Company
IL	IBMLink
JDR	JDR Microdevices
MC	MacUser
MW	MacWarehouse
MZ	Mac Zone/PC Zone
MH	McGraw-Hill On-Line Bookstore
MCS	Mission Control Software
MCW	MicroWarehouse
PA	Parsons Technology
PCA	PC Catalog •
PCC	PC/Computing
PM	PC Magazine
PCB	PC Publications
PRC	PRC Database Publishing
▼ PTR	Prentice Hall PTR •
SR	Sears Shop At Home •
BK	Small Computer Book Club •
WS	Windows Sources

CLUBS/MEMBERSHIPS

ATV	AutoVantage Online •
▼ PTR	Prentice Hall PTR •
CD	BMG Music Service •
BOMC	Book-of-the-Month Clubs •
BEM	Bose Express Music
CCB	Children's Book-of-the-Month Club •
FREECD	Columbia House •
CARD	CompuServe Visa Store •
FFS	Florida Fruit Shippers ★
FCB	Fortune Book Club •
LENS	Lens Express
LOS	Library of Science Book Club •
DINE	Premier Dining •
QPB	Quality Paperback Book Club •



COMPUTER SOFTWARE

ABSOLU	Absolut Museum
BB	Broderbund
CF	CheckFree Corporation •
ORDER	CompuServe Store ★
CE	Computer Express
CS	Computer Shopper
DB	Data Based Advisor
DD	Digital's PC Store •
EP	Epic MegaGames
PWM	Exec/Direct
FORD	Ford Electronic Showroom ■
▼ HTS	Hybrid Technical Systems
IBMSP	IBM Personal Software Products •
JDR	JDR Microdevices
MW	MacWarehouse
MZ	Mac Zone/PC Zone
MCS	Mission Control Software
MCW	MicroWarehouse
PA	Parsons Technology
PCA	PC Catalog •
SAF	Safeware Computer Insurance
SD	Shareware Depot ■
SI	Sierra Online
SP	Softdisk Publishing



GIFTS/FLOWERS/ GOURMET FOODS

FGH	800-Flowers & 800-Gifthouse
AIF	Adventures in Food ★
AK	Alaska Peddler
BH	Breton Harbor Baskets and Gifts
BR	Brooks Brothers
CC	The Chef's Catalog •
COF	Coffee Anyone ???
EX	Executive Stamper ■
FG	Figi's Gifts •
FFS	Florida Fruit Shippers ★
FS	Flower Stop •
FTD	FTD ONLINE
GW	Garrett Wade Woodworking
GS	The Gift Sender
GIM	Gimmee Jimmy's Cookies
GMR	Green Mountain Coffee Roasters
HS	Hammacher Schlemmer
HAM	Honey Baked Ham •
LANDS	Lands' End
LE	The Laser's Edge
MMA	The Metropolitan Museum of Art
OS	Omaha Steaks ■
PFS	Paul Fredrick Shirt Company
DINE	Premier Dining •
SUN	Sunglasses, Shavers & More
DINER	Virginia Diner
WK	Walter Knoll Florist

HOBBIES/TOYS/PETS

▼ CAMP	CAMPOR
GW	Garrett Wade Woodworking
IAMS	The IAMS Company •

INVESTMENTS/FINANCE/ REAL ESTATE

INC	Business Incorporating Guide
CF	Checkfree Corporation •
CORP	The Company Corporation
CARD	CompuServe Visa Store •
CIC	Continental Insurancenter •
DR	Dreyfus Corporation •
ENT	Entrepreneur Group •
EAM	Express America Mortgage •
HRB	H&R Block •
HF	HomeFinder by AMS ■
TKR	Max Ule Discount Brokerage ★
NN	NewsNet ■
RELO	Relocation Network •
SAF	Safeware Computer Insurance
SD	Shareware Depot ■
CRE	TRW Credentials •
TC	Twentieth Century Mutual Funds
UP	University of Phoenix •
JW	Wiley Pro-Shop •

MERCHANDISE/ ELECTRONICS

CC	The Chef's Catalog
CVA	Colonel Video & Audio
CA	Concord Direct ★
CFD	Crutchfield Electronics •
BEDS	Dial-A-Mattress •
ESCORT	The Escort Store •
FMC	Ford Motor Company ■
HS	Hammacher Schlemmer
HTH	The Heath Company
▼ HTS	Hybrid Technical Systems
JCP	JCPenney ■
PWP	Penny Wise Custom Print Shop •
SR	Sears Shop At Home •
SUN	Sunglasses, Shavers and More
ZBEST	Z Best Electronics & Appliance



OFFICE SUPPLIES/ BUSINESS SERVICES

INC	Business Incorporating Guide
CORP	The Company Corporation
CARD	CompuServe Visa Store •
DR	Dreyfus Corporation •
EX	Executive Stamper ■
HRB	H&R Block •
TTS	H&R Block Tax Training School •
HF	HomeFinder by AMS ■
TKR	Max Ule Discount Brokerage ★
ND	Nicholas Direct
PWP	Penny Wise Custom Print Shop •
PW	Penny Wise Office Products •
RELO	Relocation Network •
SR	Sears Shop At Home •
TC	Twentieth Century Mutual Funds
USM	U.S. News & World Report

SPORTS/FITNESS/HEALTH

AC	Americana Clothing
AU	Austad's •
▼ CAMP	CAMPOR
CL	Contact Lens Supply
RX	Health & Vitamin Express
LENS	Lens Express
SDV	SDV Vitamins ★

TRAVEL/VACATIONS

AF	Air France ■
ASU	Airline Services Unlimited
AK	Alaska Peddler
▼ AMZ	Amazing Vacation Deals
CRUISE	Compu-Cruise by Rosenbluth
▼ TA	Travelers Advantage •

HOW TO SHOP:

When you see a product you would like to purchase, if prompted, type "O" to order. Otherwise, simply select the item from the menu. Continue shopping, or complete the order by typing "CHECKOUT." An electronic order form will appear and you will be prompted for all pertinent information such as size, color, delivery method and credit card billing. To cancel your order at any time, type "EXIT." Before your order is sent to the Mall merchant, you will have the opportunity to verify that your order is correct and to make any necessary changes. Once your order is complete, a CompuServe order number will be given.

SHIPPING:

Shopping in most stores in The Electronic Mall is available to CompuServe members around the world. Certain postal, national and trade laws prevent certain Electronic Mall merchants from being able to ship their goods to all areas. The following guide will help you with your store selection:

- U.S. Only
- U.S. and Canada

- ★ Please go online for details
- All other merchants ship worldwide.

▼ The Electronic Mall is pleased to welcome our newest merchants!

GO MALL

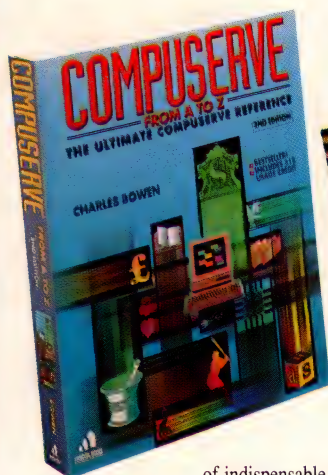


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At The Electronic Mall, the benefits of shopping include much more than just the convenience of shopping online 24 hours a day. Many Mall stores also offer you the opportunity to earn valuable CompuServe connect-time credits! Here are just a few of the current offers:

Join The Electronic Mall Elite and Get a \$2.50 Connect-Time Credit!

As a member of The Electronic Mall Elite, you'll receive a monthly electronic newsletter with exclusive special offers, free gifts, sales, promotions and more. As a member, you'll be able to access details of the offers online anytime by typing GO ELITE. To become an Elite member, just complete the online Elite survey and receive your \$2.50 credit! GO ELITE



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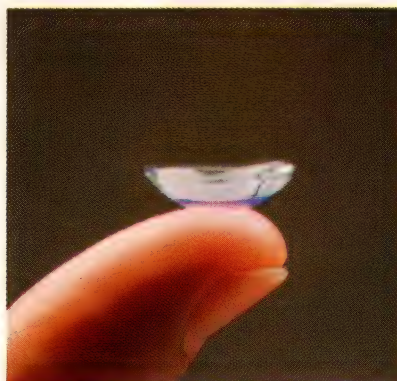
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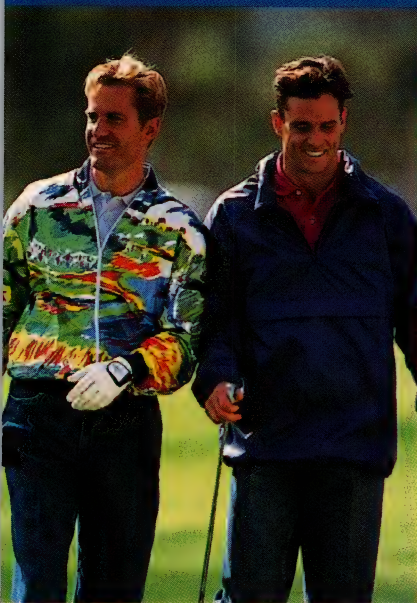
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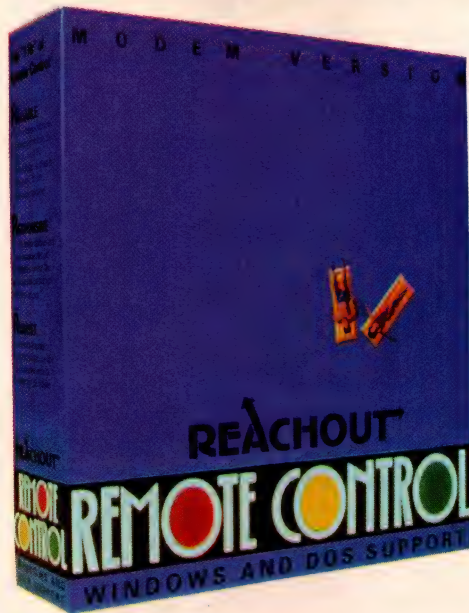


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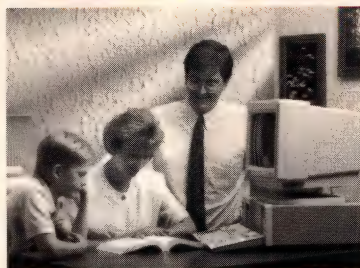


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Readers' Writes

How to Get the Most out of CompuServe

with Charles Bowen



Charles Bowen is a contributing editor of CompuServe Magazine, author of *CompuServe From A to Z*, and co-author of *How to Get the Most out of CompuServe*, both from Random House.

How can I find out what freeware/shareware/commercial offline navigators are available? I'd like to switch over to one but don't know where to start.

Kenneth H. Saloranta
Mississauga, Ontario, Canada

In looking for offline navigators, you might start your research in the free Practice Forum (GO PRACTICE). Library 1 contains some informational files on a number of the prominent programs (such as TAPCIS, OzCIS, and AutoSIG) as well as a useful overview in AUTOPINF, a text file of frequently asked questions prepared by Wine and Beer Forum associate sysop Robin Garr.

Whenever I'm exploring CompuServe, I don't want to accidentally jump into extended services. Even though I may spend only a short while in an extended service, I'd still like some way of knowing if I'm in it or not. Is there a way to find out without having to look through the manuals?

Hao Y. Huang
Cranston, Rhode Island

One way to know in advance whether a feature is in extended or basic services is to use the "Find" function. If you are using CompuServe Information Manager, select the "Find" option from the Services menu and, when prompted, type a keyword describing the feature you're seeking; if you are using a third-party communications program, type FIND and a keyword at any prompt. The resulting display of services looks something like this:

- 1 APCC Info Exchange Forum +
[APPCFORUM]
- 2 Broderbund Software(FREE) [BB]
- 3 CADD/CAM/CAE Vendor Forum +
[CADDVEN]
- 4 CIM Support Forum(FREE)
[CIMSUPPORT]
- 5 CheckFree(FREE) [CF]
- 6 Cititronics(FREE) [CTR]
- 7 Classifieds [CLASSIFIEDS]
- 8 CompuBooks(FREE) [CBK]
- 9 Computer Buyers' Guide(\$)
[COMPBG]
- 10 Computer Database Plus(\$)
[COMPDB]
- 11 Computer Express(FREE) [CE]

Services listed with a plus (+) are extended services; those without one are basic services. Those listed with a dollar sign (\$) are surcharged features (available at a charge in addition to the usual connect-time fees). Free services are also indicated.

You can also get a list of all the basic services by typing GO BASIC and making selections from the resulting menu.

In an earlier column, you talked about Phone*File, which seems to be an excellent service for domestic tele-

phone numbers. Is there a way to look up U.S. business telephone numbers on CompuServe?

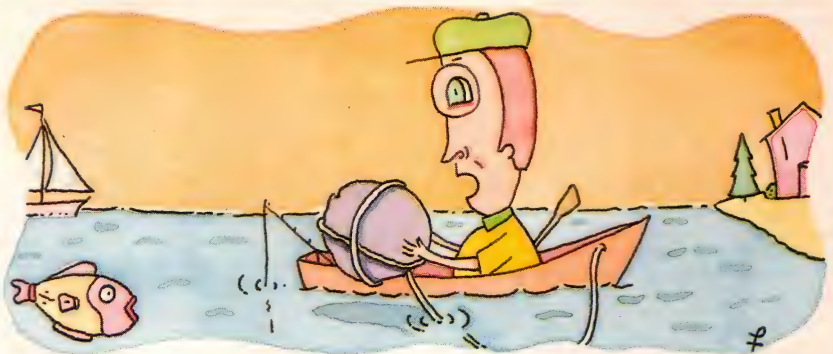
Rob Grant
London, United Kingdom

You might be interested in Biz*File (GO BIZFILE), which provides access to names, addresses, and phone numbers for more than 11 million U.S. and Canadian business listings; it contains data including business name, address, phone number, and length of time each business has been listed in its source directory. Listings can be retrieved by searching the company name, the company phone number, or the type of business. Biz*File also includes Boolean operators to search company names more effectively. The service is available around the clock seven days a week except for a three-hour period beginning at 8 P.M. Eastern Time on the last Friday of each month. The database is surcharged at \$15 an hour.

Send questions to CompuServe User ID number 70007,411. If your question is answered in this column, we'll apply a \$25 connect credit to your CompuServe account.

Mensa® Puzzler

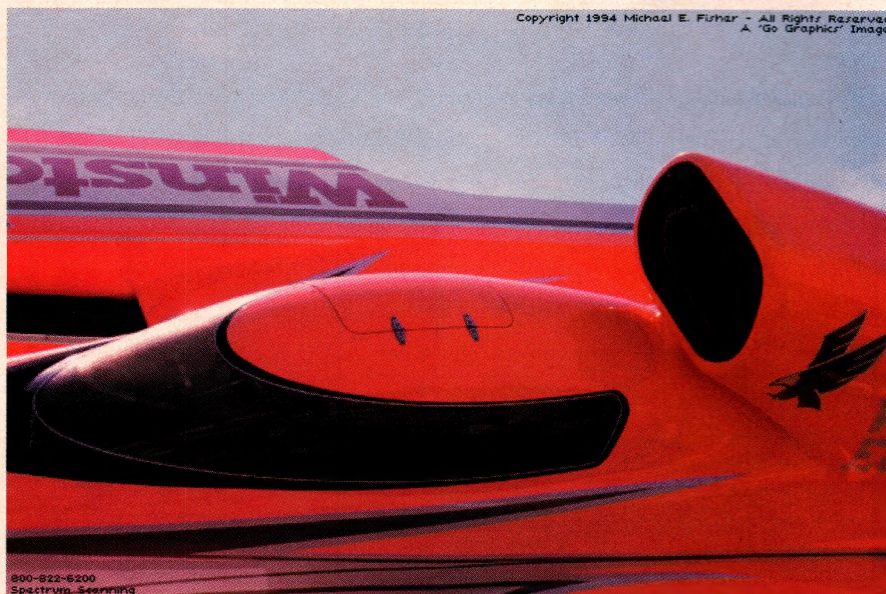
This month's Mensa Puzzler was submitted by CompuServe member David F. Benway. You'll find the answer in the Mensa Forum's (GO MENSA) News Flash.



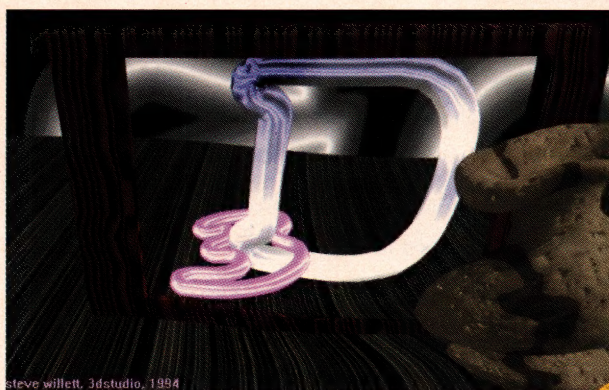
I paddled my rowboat out onto a small pond to see if I could catch some fish. When I got to my favorite spot, not having a store-bought anchor, I used the one I made: a good-size rock with plenty of rope securely tied to it. I heaved it over the side and it rapidly sank to the bottom. Question: What happened to the level of the pond? Did it go up or down, or stay the same?

Do you have a Puzzler that you'd like to share with CM readers? Send your entry of no more than five brief puzzles (with answers) to: Puzzlers, *CompuServe Magazine*, P.O. Box 20212, Columbus, OH 43220. Include your full name, address, daytime telephone number, and CompuServe User ID number. Puzzles that are not sensitive to character positioning may be sent by CompuServe Mail to User ID number 76004,3302. If your puzzle is used here, we'll credit \$35 to your CompuServe account.

Graphic of the Month



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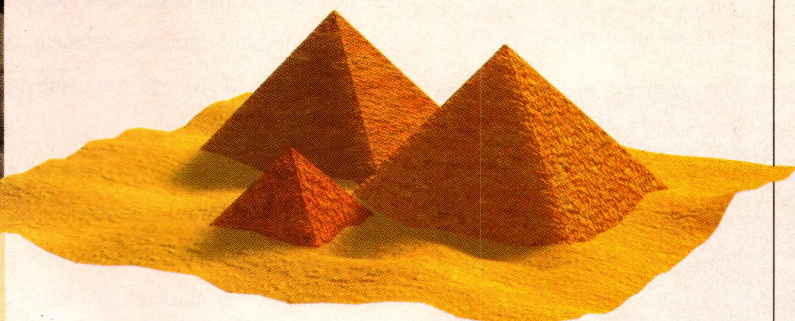


steve willett, 3dstudio, 1994

If you have a favorite image on CompuServe, consider nominating it as a Graphic of the Month. Provide the file name and identify the forum and library where the image is stored (do not send the files themselves) and send the information by CompuServe Mail to User ID number 76004,716. If the image you nominate is selected as the Graphic of the Month, you and the image uploader/creator will receive a \$25 CompuServe account credit. Image uploaders/creators are permitted to nominate themselves, but only one \$25 credit is applied to each member.

CM's Graphic of the Month for August is a GIF image of a Winston hydroplane race boat on display at the yearly Ranier Cup race held near Seattle, Washington, scanned from a photograph by Michael E. Fisher. Fisher took the photograph using a Nikon F4 camera with Ektachrome 100 slide film. Spectrum Scanning used a Microtek ScanMaker 1850 to obtain the raw data from Fisher's photograph and then custom-processed it with several image-processing applications. The image resolution is 640x480. The image, *Winston Hydroplane Race Boat*, is available in the Graphics Corner Forum's (GO CORNER) Library 4, "Cars/Boats/Planes," as MF0001.GIF. Fisher works in medical diagnostic imaging, the digital display and storage of X-rays, CAT scans, etc. He has had an interest in photography, computers, and computer graphics since the late 1970s. "I've been waiting a long time for the day I could marry them in a medium that can be shared with a larger audience," he says.

This month's runners-up are *3-D Rendering of a Surreal Scene*, by Steve Willett, found in the Autodesk Multimedia Forum's (GO ASOFT) Library 3, "Autodesk 3D Studio," NEON3D.GIF (159,338 bytes); and *Synthetic Pyramids of Giza*, by Rafael Millan, found in the Graphics Developers Forum's (GO GRAPHDEV) Library 7, "Raytrace Images," GIZA.GIF (143,669 bytes).



MEMBER ESSAY

A Film Career Far (But Not Removed) From Tinseltown

As a professional actor, I have chosen to live in Chicago because of its supportive theater community. Although many movies are filmed on location in Chicago, the casting call for major roles is compiled in Los Angeles. By the time the roles in a particular movie are announced in the trade magazines, the Los Angeles talent agencies have inundated the producers with photographs and résumés of their actors. This puts me at a major disadvantage. But using CompuServe's Hollywood

Hotline (GO HOLLYWOOD) solves the problem. The Hotline's "Entertainment News" category provides daily news in the entertainment industry, including new film projects and their producers. If I see a project I think I'm suited for, I fax my résumé to the producer and call my Los Angeles agent, who then sends my photograph to the producer. With this two-cannon approach, I impress the producer with my professionalism and eagerness to work. When the producer comes to Chicago

to cast parts, I am on the casting-call list. I thank the Hollywood Hotline for allowing me to be a "Los Angeles-based" actor.

Les Golden
Oak Park, Illinois

Compete for \$50 worth of connect-time credits in *CompuServe Magazine's* monthly Member Essay contest. Write a 200-word essay describing an original way you've used the Information Service and send it to CompuServe User ID number 76004,3302. Include your full name and address.

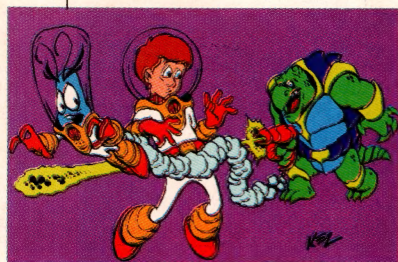
UPDATE



AL HIRSCHFELD

Classy Caricatures

Meet the world's greatest caricaturist, Al Hirschfeld, and view more than 200 GIF images of his work in the Entertainment Drive Forum. From illustrations of *Star Trek: The Next Generation* (shown above) to those of Broadway's *Beauty and the Beast*, the Beatles, and Madonna, Hirschfeld's work can be found exclusively online in the forum's Library 11, "Theatre Row." Search using the keyword HIRSCHFELD to locate these files. Also, Hirschfeld will answer members' questions on Aug. 12 at 10 P.M. EDT (4 A.M. CET) in the forum's Conference Room 1, "The Silver Screen Bar." GO EDRIVE



Get the Comics, Meet the Makers

Comic-book and animation lovers can interact with artists, writers, editors, and publishers of their favorite works and download comics in the Comics/Animation Forum and the Comic Publishers Forum. Check out *Zwerp* (shown above), featuring Kez Wilson's interstellar rascal; the first issue of *Goldenrod*, a new superhero comic by famed Superman writer Elliott S. Maggin; the complete run of the *Sherlock Holmes* comic strip by Tom Alvarez; *Malice Defeated*, a historical comic strip by Rod Underhill; and others. GO COMICS or GO COMPUB.

Send *CompuServe Magazine* a 200-to-400-word essay describing how CompuServe has saved the day or changed your life, and you may win a \$100 usage credit. Winning essays will be published in the magazine's December 1994 cover story. In addition, members submitting the top 48 entries will receive a \$25 gift certificate from Electronic Mall merchants including 800-Flowers & 800-GiftHouse, Adventures in Food, Computer Express, Florida Fruit Shippers, the Gift Sender, HarperCollins Online, McGraw-Hill Bookstore, and Penny Wise Office Products. To enter, submit your essay by Aug. 15, 1994, to User ID 76004,3303. For complete contest details, GO ESSAY.

UFO and paranormal-phenomena buffs can interact with the staff of the U.S. television show *Encounters: The Hidden Truth*, in the Encounters Forum. Share your own UFO experiences, access in-depth research and interviews, and attend conferences on related topics. GO ENCOUNTERS

Get up-to-date information about Microsoft's newest version of Windows, "Chicago," in the Microsoft WinNews Forum. The largest online resource for Chicago-related news, the forum provides files to fill you in on all aspects of the program, including the new user interface, networking, systems management, the new WinG programming interface, and more. GO WINNEWS

First-time users of Health Database Plus get two articles with no transaction charge during their first session in August. Retrieve abstracts and full-text articles on health care, disease prevention and treatment, fitness and nutrition, substance abuse, and almost any health-related topic. GO HLTDB

Access the latest information on hardware and software performance standards in the Benchmark & STDS Forum, a vendor forum for testing, benchmarking, and standardizing organizations. Representatives answer questions in the message sections. Download performance-measurement tools, test results, and more from the libraries. GO BENCHMARK

Discuss the Infobahn with top German executives in a Deutsches Ziff Windows Forum conference on Aug. 8 at 7 P.M. CET (1 P.M. EDT). The managing directors of the two major online services in Germany, Eric Danke of Datex-J/BTX and Felix Somm of the CompuServe Information Service, will discuss Germany's way to the information superhighway. GO GERWIN

NEXT MONTH • CompuServe 'Plugged': How the Popular Music 'Biz' Bonds With Its Audience Online • The Evolving Platform: Will User Friendliness Help UNIX? • Watch Words: In Database Searching, the Right Phrase Pays • Kings of the Road: RV Owners Ride the Real and Digital Highways • Inn Style: Why Bed & Breakfasts Are Better

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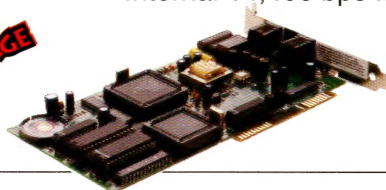
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